

SAFETY DATA SHEET

RVS Technology Injection System Protection & Restoration, RVS Technology 2-Stroke Engine Protection & Restoration, RVS Technology 2-Stroke Engine Treatment, RVS Technology Chain Saw Protection & Restoration, RVS Technology Chain Saw Treatment

SDS according to Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II with amendments in accordance with Commission Regulation (EU) 2020/878.

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

Date issued August 21st, 2023
Date verified August 21st, 2023

1.1 Product identifier

Product name RVS Technology Injection System Protection & Restoration, RVS Technology 2-Stroke Engine Protection & Restoration, RVS Technology 2-Stroke Engine Treatment, RVS Technology Chain Saw Protection & Restoration, RVS Technology Chain Saw Treatment
Product definition Ready-for-use mixture in a bottle

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

Use of the substance/preparation Treating metal surfaces of the mechanism being used in
Use categories PC-TEC-12 Metal surface treatment products
Use by consumers Yes

1.3 Details of the supplier of the safety data sheet

Supplier

Company name Oy RVS Technology Ltd.
Office address Pultitie 2
Postcode 00880
City Helsinki
Country Finland
Tel. +358-(0)9-7599 010
E-mail rvs@rvs.fi
Website www.rvs.fi
Enterprise no. (VAT number) FI21185745

1.4 Emergency telephone number

Emergency telephone Description: Poison Information Centre (in Finland), Tukholmankatu 17, Box 790, 00029 HUS (Helsinki), (24 h)
Telephone: +358-9-4711 or +358-9-471977

SECTION 2: Hazard identification

2.1 Classification of substance or mixture

CLP classification, comments The substance has not been classified as hazardous.

2.2 Label elements

2.3 Other hazards

PBT / vPvB This product is not classified as a PBT or vPvB substance.

SECTION 3: Composition / information on ingredients

3.1 –

3.2 Mixtures

Composition type Mixture

Substance	Identification	Classification	Contents	Comments
Hydrocarbons, C11-C14, n-alkanes,	EC no.: 926-141-6	Asp. Tox. 1; H304	< 3 % vol./vol.	

RVS Technology Injection System Protection & Restoration, RVS Technology 2-Stroke Engine Protection & Restoration, RVS Technology 2-Stroke Engine Treatment, RVS Technology Chain Saw Protection & Restoration, RVS Technology Chain Saw Treatment – Version 1
 isoalkanes, cyclical
 <2% aromates

SECTION 4: First aid measures

4.1 Description of first aid measures

General	In case of an accident or nausea, get immediate medical attention (show this label if possible).
Inhalation	The person must repose in fresh air under observation. In case of nausea, get medical attention. Take the Safety Data Sheet with you.
Skin contact	Rinse the skin immediately thoroughly with plenty of soap and water. Remove contaminated clothing and continue rinsing. Contact a doctor if symptoms persist.
Eye contact	Immediately flush eyes with plenty of water. Keep eye lashes widened. Remove contact lenses, if easy to do. Continue rinsing. Seek medical attention.
Ingestion	Seek medical attention. Take the Material Safety Data Sheet with you. Do not induce vomiting. If vomiting cannot be avoided, keep the head down in order to prevent the stomach contents from entering the lungs. Check breathing of an unconscious person. Monitor breathing. If breathing stops, give artificial ventilation. Unconscious victims must be turned on their sides with their heads down, keep them warm. Call an ambulance. Do not give an unconscious person anything to drink.

4.2 Most important symptoms and effects, both acute and delayed

General symptoms and effects	Repeated exposure may cause skin desiccation or blister. Inhaling vapours and mists in high contents causes fatigue, headache, dizziness, and nausea.
------------------------------	---

4.3 Indication of any immediate medical attention and special treatment needed

Medical care	Treat symptomatically.
--------------	------------------------

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Foam. Powder. Carbon dioxide (CO ₂).
Improper extinguishing media	Avoid directing a water jet towards the fire. It may spread the fire.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	In case of fire, hazardous gases may form. Carbon monoxide (CO). Carbon dioxide (CO ₂).
-------------------------------	--

5.3 Advice for firefighters

Personal protective equipment	Wear self-contained breathing apparatus (SCBA) and full protective equipment. Choice of breath protection device during an early phase of a fire: Follow general instructions of the place of work.
Firefighting measures	Cool containers exposed to heat with water until the fire has been extinguished. Remove all the ignition sources if it can be done safely.
Other information	Collect extinguishing water. Waste is disposed of in accordance with instructions given by local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures	Wear appropriate protective equipment. Pay attention on other possible chemicals in the surroundings. Evacuate the area. Stop leak if it can be done safely.
------------------	--

6.2 Environmental precautions

Environmental precautionary measures	Prevent the spilt product from entering water and sewage systems and from contaminating the soil and vegetation. If it is not possible, immediately inform the police and appropriate authorities.
--------------------------------------	--

6.3 Methods and material for containment and cleaning up

Cleaning	Collect spilt material in an inert absorption material, and put in a suitable container. Spills and polluting material are collected and removed from the place of work as soon as possible, and they have to be put in suitable, marked waste containers.
----------	---

6.4 Reference to other sections

Other instructions

Personal protective equipment: see section 8.
Waste disposal: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling

Ensure good ventilation. Follow good chemical hygiene. Beware of inhaling vapours and the substance entering skin and eyes. Keep away from ignition sources – Smoking prohibited. Keep away from heat, sparks, and open fire. Prevent sparking caused by static electricity. Containers must be kept tightly closed before and after use. Eating, drinking, and smoking are prohibited while using the product.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Store in tightly sealed original package or container in a cool place with good ventilation. Keep away from heat/sparks/open fire/hot surfaces. – Smoking prohibited. Keep containers tightly closed. Store upright. Do not store in proximity of groceries or animal food.

7.3 Specific end use(s)

Specific methods of use

No specific recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Substance	Identification	Exposure limits	Year
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclical <2% aromates	CAS number: 64742-47-8	Exposure limit (8 h): 5 mg/m Source: HTP-Arvot 2020 (in Finnish) Comments: Oil mist	

DNEL/PNEC

DNEL

Comment: Data are not available.

PNEC

Comment: Data are not available.

8.2 Exposure controls

Measures to prevent exposure

Product related measures to prevent exposure

Follow good chemical hygiene. Eating, drinking, and smoking are prohibited while using the product. Remove contaminated clothes and wash them thoroughly before wearing them again. Wash hands and any dirty area with water and soap after finishing the work.

Appropriate technical measures to prevent exposure

The work place has to have an emergency shower and a possibility for eye flushing when using the product.

Eye and face protection

Required properties

Safety goggles that fully cover the eyes.

Hand protection

Skin and hand protection, short-term contact

Wearing protective gloves is recommended.

Suitable glove type

Nitrile rubber gloves are the most suitable.

Hand protection, comments

Choose best possible gloves in cooperation with the glove supplier. They can tell you the penetration time of the glove material.

Skin protection

Suitable protective clothes

Not necessary in normal circumstances. Suitable protective clothing must be worn if direct contact or splashes are possible.

Skin protection, comments

Remove contaminated clothes and wash them thoroughly before wearing them again. A possibility for immediate eye flushing and shower at the work place.

Breathing protection

General breathing protection

In normal use circumstances a respirator is not necessary.

Breathing protection needed

In case of insufficient ventilation or if there is a risk of inhaling oil mist, you can wear a suitable bi-filter face mask (type (A2/P3)).

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form

Liquid

RVS Technology Injection System Protection & Restoration, RVS Technology 2-Stroke Engine Protection & Restoration, RVS Technology 2-Stroke Engine Treatment, RVS Technology Chain Saw Protection & Restoration, RVS Technology Chain Saw Treatment – Version 1

Physical state	Suspension.
Colour	Yellowish.
Odour	Characteristic.
Odour threshold	Comments: Not suitable.
pH	Comments: Not suitable.
Melting point / melting range	Value: -33 °C (-27.4 °F) Method: ASTM D-97
Boiling point / boiling range	Value: > 400 °C (> 752 °F) Comments: The petroleum ether in the mixture boils at 193–245 °C (379–473 °F)
Flash point	Value: > 70 °C (158 °F) Method: ASTM D-92 / ASTM D-93/PMCC
Evaporation rate	Comments: Not suitable.
Flammability	Not suitable.
Lower explosion limit and unit of measure	Comments: Not suitable.
Upper explosion limit and unit of measure	Comments: Not suitable.
Vapour pressure	Comments: Petroleum ether: 19–25 kPa (2.8–3.6 psi) Temperature: 20 °C (68 °F).
Vapour density	Comments: Not suitable.
Density	Value: 850–900 kg/m ³ Temperature: 15 °C (~ 60 °F)
Solubility	Solvent: Water Comments: The product is not water-soluble. Solvent: Other Name: Organic solvents. Comments: Dissolves in organic solvents.
Partition coefficient: n-octanol / water	Comments: Not suitable.
Spontaneous combustability	Comments: Not suitable.
Decomposition temperature	Comments: Not suitable.
Viscosity	Comments: Not suitable.
Explosive properties	Not suitable.
Oxidising properties	Not suitable.

9.2 Other information

9.2.1 –

9.2.2 Other safety properties

Remarks	Data not available.
---------	---------------------

SECTION 10: Stability and reactivity

10.1 Reactivity

Reactivity	There are no known reactivity hazards connected with this product.
------------	--

10.2 Chemical stability

Stability	Stable when in normal temperatures and used in accordance with instructions.
-----------	--

10.3 Possibility of hazardous reactions

Possibility of hazardous reactions	No known reaction hazards are related with this product.
------------------------------------	--

10.4 Conditions to avoid

Conditions to avoid	Protect from heat, sparks, and open fire. Not to be exposed to high temperatures or direct sunlight.
---------------------	--

10.5 Incompatible materials

Materials to avoid	Oxidising materials.
--------------------	----------------------

10.6 Hazardous decomposition products

Hazardous decomposition products	Carbon monoxide (CO). Carbon dioxide (CO ₂).
----------------------------------	--

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Other toxicological information	No data on the product as such exist.
---------------------------------	---------------------------------------

Information on other health hazards

Estimation of acute toxicity	Based on the available information classification criteria are not met.
------------------------------	---

RVS Technology Injection System Protection & Restoration, RVS Technology 2-Stroke Engine Protection & Restoration, RVS Technology 2-Stroke Engine Treatment, RVS Technology Chain Saw Protection & Restoration, RVS Technology Chain Saw Treatment – Version 1

Estimation of skin corrosion / skin irritation	Based on the available information classification criteria are not met.
General respiratory or skin sensitisation	Based on the available information classification criteria are not met.
Mutagenicity	Based on the available information classification criteria are not met.
Estimation of carcinogenicity	Based on the available information classification criteria are not met.
Estimation of reproductive toxicity	Based on the available information classification criteria are not met.
STOT – single exposure, classification	Based on the available information classification criteria are not met.
STOT – repeated exposure, classification	Based on the available information classification criteria are not met.
Estimation of aspiration hazard classification	Based on the available information classification criteria are not met.

11.2 Information on other hazards

Properties that disturb hormone activity	No data available.
--	--------------------

SECTION 12: Ecological information

12.1 Toxicity

Ecological toxicity	No data on the product as such exist.
---------------------	---------------------------------------

12.2 Persistence and degradability

Description/estimation of persistence and degradability	The product is not easily biodegradable.
---	--

12.3 Bioaccumulative potential

Estimation of bioaccumulative potential	Accumulation: not believed to be bioaccumulative.
---	---

12.4 Mobility in soil

Mobility	The product is non-soluble and floats on water.
----------	---

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment results	This product has not been classified as an PBT or vPvB substance.
---------------------------------	---

12.6 Endocrine disrupting properties

Endocrine disrupting properties	No data available.
---------------------------------	--------------------

12.7 Other adverse effects

Other ecological data	No data available.
-----------------------	--------------------

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate waste treatment methods, product	The product must not be thrown to the environment, but it has to be collected, and measures have to be undertaken in accordance with the instructions of the local authorities. Avoid direct contact with waste. Empty containers must not be reused.
--	---

SECTION 14: Transport information

Product classified as hazardous	No
---------------------------------	----

14.1 UN number

14.2 UN proper shipping name

Comments	Not applicable.
----------	-----------------

14.3 Transport hazard class(es)

Comments	Not applicable.
----------	-----------------

14.4 Packing group

Comments	Not applicable.
----------	-----------------

14.5 Environment hazards

Comments	Not applicable.
----------	-----------------

14.6 Special precautions for user

Other applicable safety measures of the user	Not applicable.
--	-----------------

14.7 Maritime transport in bulk according to IMO instruments

Pollution category	Not included.
--------------------	---------------

SECTION 15: Regulatory information

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

Restrictions	Not known.
National legislation	Decree of the Ministry of Social Affairs and Health of Finland on delivering notifications on chemicals and information on amounts 1118/2020.
Legislation and regulations	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, with later amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a 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, with later amendments. Seveso directive P5c

15.2 Chemical safety assessment

Chemical safety assessment performed	No
--------------------------------------	----

SECTION 16: Other information

Supplier remarks	Data in this material safety data sheet is based on the data that was available to us on the date of compiling, and they have been given provided the product will be used in normal circumstances and in harmony with methods of use indicated in the package and relevant technical literature. Other use of the product, possibly in combination with other products or processes, is done on the responsibility of the user. H304 May be fatal if swallowed and enters airways.
List of H phrases used (in sections 2 and 3)	H304 May be fatal if swallowed and enters airways.
The most important sources used in compiling the material safety data sheet	Material safety data sheet December 5 th , 2018
Amendment after previous version (additions, removals and checks)	Significant amendments to the previous version are marked on the left margin with vertical lines.
Version	1
English translation	This document is a translation of the original document in Finnish that has been made in accordance with the laws and regulations applicable in Finland. Parts of this document may not be applicable in other countries and territories. This document may lack essential information that is required in other countries and territories.