SAFETY DATA SHEET

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

GALVA SPRAY

Creation date	25th October 2022		
Revision date		Version	4.0

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

1.1. Product identifier GALVA SPRAY

Substance / mixture	mixture
Number	R 34547
UFI	A1P2-93QR-H00S-82V8

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

Mixture's intended use

Corrosion inhibitor.

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 1, H222, H229
Asp. Tox. 1, H304
Eye Irrit. 2, H319
STOT SE 3, H336
Aquatic Chronic 3, H412

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

Most serious adverse physico-chemical effects

Extremely flammable aerosol. Pressurised container: May burst if heated.

Most serious adverse effects on human health and the environment

May cause drowsiness or dizziness. Causes serious eye irritation. May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

acetone
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics
xylene (mixture of isomers)
hydrocarbons, C9, aromatics

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
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.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
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.
P312	Call a POISON CENTER/doctor if you feel unwell.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

Supplemental information

EUH066	Repeated exposure may cause skin dryness or cracking.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3. Other hazards

Buildup of explosive mixtures possible without sufficient ventilation. 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: 67-64-1 EC: 200-662-2 Registration number: 01-2119471330-49	acetone	25-<50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	4
CAS: 106-97-8 EC: 203-448-7 Registration number: 01-2119474691-32	butane (containing < 0,1 % butadiene (203-450-8))	10-<20	Flam. Gas 1, H220 Press. Gas (compressed gas), H280	
CAS: 74-98-6 EC: 200-827-9 Registration number: 01-2119486944-21	propane	10-<20	Flam. Gas 1, H220 Press. Gas (compressed gas), H280	
CAS: 75-28-5 EC: 200-857-2 Registration number: 01-2119485395-27	isobutane (containing < 0,1 % butadiene (203-450-8))	5-<10	Flam. Gas 1, H220 Press. Gas (compressed gas), H280	

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
EC: 919-857-5 Registration number: 01-2119463258-33	hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	5-<10	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336	
CAS: 13463-67-7 EC: 236-675-5 Registration number: 01-2119489379-17	titanium dioxide	5-<10	Carc. 2, H351 (inhalation)	1, 2, 3
CAS: 1330-20-7 EC: 215-535-7 Registration number: 01-2119488216-32	xylene (mixture of isomers)	5-<10	Asp. Tox. 1, H304 Acute Tox. 4, H312+H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373	4
EC: 918-668-5 Registration number: 01-2119455851-35	hydrocarbons, C9, aromatics	2,5-<5,0	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335, H336 Aquatic Chronic 2, H411	

Notes

1 Note V: If the substance is to be placed on the market as fibres (with diameter < 3 µm, length > 5 µm and aspect ratio ≥ 3:1) or particles of the substance fulfilling the WHO fibre criteria or as particles with modified surface chemistry, their hazardous properties must be evaluated in accordance with Title II of this Regulation, to assess whether a higher category (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal) should be applied.

2 Note W: It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

This note aims to describe the particular toxicity of the substance; it does not constitute a criterion for classification according to this Regulation.

3 Note 10: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

4 Substance with a Union workplace exposure limit.

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 inhaled

Transfer the affected person to the fresh air and ensure calm environment for body and mind. In the event of issues, find medical advice.

If on skin

Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothes immediately.

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. In the event of issues, find medical advice.

If swallowed

DO NOT INDUCE VOMITING! Provide medical treatment.

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

If inhaled

May cause drowsiness or dizziness. Breathing difficulty. Headaches.

If on skin

not available

If in eyes

Causes serious eye irritation.

If swallowed

Nausea.

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

not available

More information

If swallowed or in case of vomiting, danger of entering the lungs. Subsequent observation for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, foam, powder. Accommodate extinguishing components to the location of fire.

Unsuitable extinguishing media

not available

5.2. Special hazards arising from the substance or mixture

Vapours mixed up with air can be explosive.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with 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

Provide sufficient ventilation. Use personal protective equipment for work. Keep unprotected persons away. Remove all ignition sources.

6.2. Environmental precautions

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

6.3. Methods and material for containment and cleaning up

Provide sufficient ventilation. 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

Ensure good ventilation/exhaustion at the workplace. Prevent contact with skin and eyes. Do not spray on an open flame or other ignition source. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Take precautionary measures against static discharge. Pressurised container: May burst if heated. Keep away from sources of heating, ignition and direct sunlight. Do not pierce or burn, even after use.

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. Protect from sunlight. Keep container tightly closed. Do not expose to temperatures exceeding 50 °C.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union **Commission Directive 2000/39/EC**

Substance name (component)	Type	Value	Note
acetone (CAS: 67-64-1)	OEL 8 hours	1210 mg/m³	
	OEL 8 hours	500 ppm	
xylene (mixture of isomers) (CAS: 1330-20-7)	OEL 8 hours	221 mg/m³	Skin
	OEL 8 hours	50 ppm	
	OEL 15 minutes	442 mg/m³	
	OEL 15 minutes	100 ppm	

DNEL

acetone

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
	Oral	62 mg/kg			
	Inhalation	200 mg/m³			

8.2. Exposure controls

Do not store together with food, drink and animal feed. Take off contaminated clothing. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Prevent contact with skin and eyes.

Eye/face protection

Tightly sealed goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. Material of gloves: Butyl rubber. Recommended thickness of the material: ≥ 0.7 mm. Penetration time of glove material: ≥ 60 min. The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. Other protection: protective workwear.

Respiratory protection

Under regular circumstances it is not necessary. In case of inadequate ventilation wear respiratory protection. Filter AX.

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	grey
Odour	after solvents
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	<0 °C
Flammability	Extremely flammable aerosol.
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	almost insoluble
Solubility in fats	data not available

Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	0,787 g/cm³ at 20 °C
Form	aerosol dispenser: spray aerosol

data not available

9.2. Other information

Evaporation rate	non-applicable
Ignition temperature	>200 °C
Content of organic solvents (VOC)	75,1 %
Solid content (dry matter)	0 % volume
Max. VOC content in the product in its ready to use condition	590,8 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

not available

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

Not developed under normal uses.

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

acetone

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	5800 mg/kg		Rat	
Dermal	LD_{50}	20000 mg/kg		Rabbit	
Inhalation	LC_{50}	76 mg/l	4 hour	Rat	

butane (containing < 0,1 % butadiene (203-450-8))

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Inhalation	LC_{50}	658 mg/l	4 hour	Rat	

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Route of exposure	Parameter	Value	Exposure time	Species	Sex
Dermal	LD_{50}	14050 mg/kg			
Inhalation	LC_{50}	>57.6 mg/l	4 hour		

hydrocarbons, C9, aromatics

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	3592 mg/kg		Rat	
Dermal	LD_{50}	>3160 mg/kg		Rat	
Inhalation	LC_{50}	>6193 mg/l	4 hour	Rat	

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	8000 mg/kg		Rat	
Dermal	LD_{50}	4000 mg/kg		Rat	
Inhalation	LC_{50}	>18.5 mg/l	4 hour	Rat	

isobutane (containing < 0,1 % butadiene (203-450-8))

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Inhalation	LC_{50}	658 mg/l	4 hour	Rat	

propane

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Inhalation	LC_{50}	>20 mg/l	4 hour	Rat	

xylene (mixture of isomers)

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Dermal	LD_{50}	1100 mg/kg		Rabbit	
Inhalation	LC_{50}	11 mg/l	4 hour	Rat	

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.
Toxicity for specific target organ - single exposure
May cause drowsiness or dizziness.
Toxicity for specific target organ - repeated exposure
Based on available data the classification criteria are not met.
Aspiration hazard
May be fatal if swallowed and enters airways.

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.

12.2. Persistence and degradability
Data 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

Water hazard class 2 (German Regulation; Self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification.

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

08 01 11 waste paint and varnish containing organic solvents or other 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

No.

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

Stowage Code: 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. Segregation Code: 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.

Hazard identification No.	
UN number	1950
Classification code	5F
Safety signs	2.1

Road transport - ADR

Limited quantities	1 L
Excepted quantities	E0
Transport category	2
Tunnel restriction code	(D)

Railway transport - RID

Marine transport - IMDG

EmS (emergency plan)	F-D, S-U

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 of 16th 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, as amended. Product contains reportable explosives precursors: Reporting of suspicious transactions, disappearances and thefts according to Regulation (EU) 2019/1148, Article 9.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
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.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H312+H332	Harmful in contact with skin or if inhaled.

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.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
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.
P312	Call a POISON CENTER/doctor if you feel unwell.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

A list of additional standard phrases used in the safety data sheet

EUH066	Repeated exposure may cause skin dryness or cracking.

EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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
DNEL	Derived no-effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
ES	Identification code for each substance listed in EINECS
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
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
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

Acute Tox.	Acute toxicity
Aerosol	Aerosol
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Asp. Tox.	Aspiration hazard
Carc.	Carcinogenicity
Eye Irrit.	Eye irritation
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Press. Gas	Gases under pressure
Skin Irrit.	Skin irritation
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

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 04 December 2020. Changes were made in sections 11, 12, 13, 15 and 16.

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.