

SAFETY DATA SHEET

RGA-1100

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

1.1. Product identifier

Trade name

RGA-1100

Product no.

14165

Unique formula identifier (UFI)

HF30-N0V1-G00E-99A9

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

Relevant identified uses of the substance or mixture

Assembly paste

Use descriptors (REACH)

Product category	Description
PC24	Lubricants, Greases and Release Products

▼ Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

ITW Spraytec Nordic

Priorsvej 36

DK-8600 Silkeborg

Denmark

Tel: +45 86 82 64 44

E-mail

info@itw-spraytec.dk

Revision

22/12/2022

SDS Version

2.0

Date of previous version

26/01/2021 (1.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Aerosol 1; H222, H229, Extremely flammable aerosol. Pressurised container: May burst if heated.

STOT SE 3; H336, May cause drowsiness or dizziness.

Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

▼ Hazard statement(s)

Extremely flammable aerosol. Pressurised container: May burst if heated. (H222, H229)

May cause drowsiness or dizziness. (H336)
 Toxic to aquatic life with long lasting effects. (H411)

Safety statement(s)

General

-

▼ Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
 Do not spray on an open flame or other ignition source. (P211)
 Do not pierce or burn, even after use. (P251)
 Use only outdoors or in a well-ventilated area. (P271)
 Avoid release to the environment. (P273)

Response

-

▼ Storage

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

Disposal

-

Hazardous substances

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

▼ Additional labelling

UFI: HF30-NOV1-G00E-99A9

2.3. Other hazards

▼ Additional warnings

In the event of leaks, high concentrations of gases can quickly form. They can be toxic, asphyxiating, or explosive. This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. ▼ Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	CAS No.: 64742-48-9 EC No.: 919-857-5 UK-REACH: Index No.:	20-40%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336	[15], [19]
Butane (<0,1 % w/w 1,3-butadiene)	CAS No.: 106-97-8 EC No.: 203-448-7 UK-REACH: Index No.: 601-004-00-0	10-30%	Flam. Gas 1A, H220	
Propane	CAS No.: 74-98-6 EC No.: 200-827-9 UK-REACH: Index No.: 601-003-00-5	10-20%	Flam. Gas 1A, H220	
Aluminium powder (stabilised)	CAS No.: 7429-90-5 EC No.: 231-072-3 UK-REACH: Index No.: 013-002-00-1	<5%	Flam. Sol. 1, H228 Water-react. 2, H261	
Zinc oxide	CAS No.: 1314-13-2 EC No.: 215-222-5 UK-REACH: Index No.: 030-013-00-7	<5%	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	
Copper powder	CAS No.: 7440-50-8 EC No.: 231-159-6 UK-REACH:	<5%	Flam. Sol. 2, H228 Aquatic Acute 1, H400 (M=1)	

Index No.:

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

▼ Other information

[15] The classification as a carcinogen / mutagen will not be taken into account as the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7) (CLP, Annex VI, note P).

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

Upon irritation of the eye: Remove contact lenses and open eyes widely. Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Seek medical assistance and continue flushing during transport.

▼ Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

None known.

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

Call a POISON CENTER/doctor if you feel unwell.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. ▼ Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)

Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. ▼ Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. ▼ Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. ▼ Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. ▼ Conditions for safe storage, including any incompatibilities

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Pressurized gas packs (spray cans, aerosol cans) must be stored behind a wire mesh, which allows gases to escape and holds back packs flying around.

▼ Recommended storage material

Keep only in original packaging.

▼ Storage temperature

< 50°C

Protected from direct sunlight.

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. ▼ Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. ▼ Control parameters

Butane (<0,1 % w/w 1,3-butadiene)

Long term exposure limit (8 hours) (ppm): 600

Long term exposure limit (8 hours) (mg/m³): 1450

Short term exposure limit (15 minutes) (ppm): 750

Short term exposure limit (15 minutes) (mg/m³): 1810

Annotations:

Carc1 = Capable of causing cancer and/or heritable genetic damage if it contains more than 0.1% of buta-1,3-diene.

Aluminium powder (stabilised)

Long term exposure limit (8 hours) (mg/m³): 10(inhalable)/4(respirable)

Copper powder

Long term exposure limit (8 hours) (mg/m³): 0,2(fume)/1(dust)

Short term exposure limit (15 minutes) (mg/m³): 2 (dusts, mists)

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.

EH40/2005 Workplace exposure limits (Fourth Edition 2020).

▼ DNEL

Copper powder

Duration	Route of exposure	DNEL
Long term – Systemic effects - Workers	Dermal	137 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	273 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	1 mg/m ³

Short term – Local effects - Workers	Inhalation	1 mg/m ³
▼ PNEC		
Copper powder		
Route of exposure	Duration of Exposure	PNEC
Freshwater		6.3 µg/L
Freshwater sediment		87 mg/kg
Marine water		5.2 µg/L
Marine water sediment		676 mg/kg
Sewage treatment plant		230 µg/L

8.2. ▼ Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

▼ Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Provide adequate general and local exhaust ventilation.

8.3. Individual protection measures, such as personal protective equipment

▼ Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Respiratory protection is not normally required in well-ventilated areas. In case of inadequate ventilation a respirator with filter A2 is recommended.

Skin protection

No special requirements.

▼ Hand protection

Gloves are usually not required. In case of prolonged or repeated skin contact, Nitrile gloves are recommended.

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0,4	480	EN374-2

Eye protection

Wear safety goggles if there is a risk of eye splash.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Aerosol

Colour

Gray

▼ Odour / Odour threshold

Characteristic

▼ pH

No data available

Density (g/cm³)

0,844

▼ Kinematic viscosity

No data available

▼ Particle characteristics

No data available

Phase changes

▼ Melting point/Freezing point (°C)

No data available

▼ Softening point/range (waxes and pastes) (°C)

Does not apply to aerosols.

▼ Boiling point (°C)

No data available

Vapour pressure

No data available

▼ Relative vapour density

No data available

▼ Decomposition temperature (°C)

No data available

Data on fire and explosion hazards

▼ Flash point (°C)

<0

Auto-Ignition (°C)

No data available

Flammability (°C)

No data available

Lower and upper explosion limit (% v/v)

No data available

Solubility

▼ Solubility in water

No data available

▼ n-octanol/water coefficient

No data available

▼ Solubility in fat (g/L)

No data available

9.2. Other information

▼ Evaporation rate (n-butylacetate = 100)

No data available

▼ Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. ▼ Reactivity

No data available.

10.2. ▼ Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. ▼ Possibility of hazardous reactions

None known.

10.4. ▼ Conditions to avoid

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

▼ Acute toxicity

Product/substance Zinc oxide

Test method

Species Rat

Route of exposure	Intraperitoneal
Test	LD50
Result	240 mg/kg ·
Other information	

Product/substance	Zinc oxide
Test method	
Species	Mouse
Route of exposure	Oral
Test	LD50
Result	7950 mg/kg ·
Other information	

Product/substance	Zinc oxide
Test method	
Species	Mouse
Route of exposure	Inhalation
Test	LC50
Result	2500 mg/m ³ ·
Other information	

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

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

May cause drowsiness or dizziness.

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.

11.2. Information on other hazards

▼ Long term effects

None known.

▼ Endocrine disrupting properties

None known.

▼ Other information

None known.

SECTION 12: Ecological information

12.1. ▼ Toxicity

Product/substance	Aluminium powder (stabilised)
Test method	
Species	Daphnia
Compartment	
Duration	24 hours
Test	LC50
Result	2600 µg/L ·
Other information	

Product/substance	Aluminium powder (stabilised)
Test method	

Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	120 µg/L ·
Other information	

Product/substance	Zinc oxide
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	LC50
Result	2600 µg/L ·
Other information	

Product/substance	Zinc oxide
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	1100 µg/L ·
Other information	

12.2. ▼ Persistence and degradability

No data available.

12.3. ▼ Bioaccumulative potential

Product/substance	Butane (<0,1 % w/w 1,3-butadiene)
Test method	
Potential bioaccumulation	No
LogPow	2,8900
BCF	No data available.
Other information	

12.4. ▼ Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. ▼ Endocrine disrupting properties

None known.

12.7. ▼ Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

▼ Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 14 - Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

16 05 04* Gases in pressure containers (including halons) containing dangerous substances






▼ Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	UN1950	AEROSOLS	Class: 2 Labels: 2.1 Classification code: 5F  	-	Yes	Limited quantities: 1 L Tunnel restriction code: (D) See below for additional information.
IMDG	UN1950	AEROSOLS	Class: 2 Labels: 2.1 Classification code: 5F  	-	Yes	Limited quantities: 1 L EmS: F-D S-U See below for additional information.
IATA	UN1950	AEROSOLS	Class: 2 Labels: 2.1 Classification code: 5F 	-	Yes	See below for additional information.

* Packing group

** Environmental hazards

▼ Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. ▼ Special precautions for user

Not applicable.

14.7. ▼ Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

▼ Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

▼ Demands for specific education

No specific requirements.

▼ SEVESO - Categories / dangerous substances

P3a - FLAMMABLE AEROSOLS, Qualifying quantity (lower-tier): 150 tonnes (net) / (upper-tier): 500 tonnes (net)

E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper-tier): 500 tonnes

▼ Regulation on explosives precursors

Aluminium powder (stabilised) (Annex II)

▼ Additional information

Not applicable.

▼ Sources

The Aerosol Dispensers Regulations 2009 No. 2824, amended in 2014 (No. 1130) and in 2018 (No. 29).

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Council Regulation (EC) No 2019/1148 on explosives precursors as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

▼ Full text of H-phrases as mentioned in section 3

H220, Extremely flammable gas.

H226, Flammable liquid and vapour.

H228, Flammable solid.

H261, In contact with water releases flammable gases.

H304, May be fatal if swallowed and enters airways.

H336, May cause drowsiness or dizziness.

H400, Very toxic to aquatic life.

H410, Very toxic to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

PC24 = Lubricants, Greases and Release Products

▼ Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

▼ **Additional information**

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the mixture in regard to physical hazards has been based on experimental data.

▼ **The safety data sheet is validated by**

MJH

▼ **Other**

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en