SAFETY DATA SHEET

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

1.1. Product identifier

Trade name
RGA-1100
Product no.
14165
REACH registration number
Not applicable

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

Relevant identified uses of the substance or mixture
Assembly paste
Lubricants, Greases and Release Products (PC24)
Uses advised against
-
The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address
ITW Spraytec Nordic
Priorsvej 36
8600 Silkeborg
Tlf.: +45 86 82 64 44
SDS info.: www.itw-spraytec.dk
Contact person
Kundeservice: Tlf: (+45) 8682 6444
E-mail
info@itw-spraytec.dk
SDS date
2018-06-29
SDS Version
3.0

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
STOT SE 3; H336
Aquatic Chronic 2; H411
See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)

Signal word
Danger
▼Hazard statement(s)
Extremely flammable aerosol. (H222)
Pressurised container: May burst if heated. (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). Wear protective clothing/protective gloves/eye protection/face protection. (P280).
Response	-
Storage	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F. (P410+P412).
Disposal	-

Identity of the substances primarily responsible for the major health hazards

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

2.3. Other hazards

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

Additional labelling

Not applicable

Additional warnings

Not applicable

VOC

Not applicable

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME:	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics
IDENTIFICATION NOS.:	CAS-no: 64742-48-9 EC-no: 919-857-5
CONTENT:	25 - 30%
CLP CLASSIFICATION:	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1 H226, H304, H336

NAME:	Butane (<0,1 % butadiene (203-450-8)
IDENTIFICATION NOS.:	CAS-no: 106-97-8 EC-no: 203-448-7 Index-no: 601-004-00-0
CONTENT:	10 - 25%
CLP CLASSIFICATION:	Flam. Gas 1 H220
NOTE:	S

NAME:	propane
IDENTIFICATION NOS.:	CAS-no: 74-98-6 EC-no: 200-827-9 Index-no: 601-003-00-5
CONTENT:	10 - 25%
CLP CLASSIFICATION:	Press. Gas H220

NAME:	zinc oxide
IDENTIFICATION NOS.:	CAS-no: 1314-13-2 EC-no: 215-222-5 Index-no: 030-013-00-7
CONTENT:	<5%
CLP CLASSIFICATION:	Aquatic Acute 1, Aquatic Chronic 1 H400, H410

NAME:	Aluminium powder (stabilised)
IDENTIFICATION NOS.:	CAS-no: 7429-90-5 EC-no: 231-072-3 Index-no: 013-002-00-1
CONTENT:	<5%
CLP CLASSIFICATION:	Flam. Sol. 1, Water-react. 2 H228, H261

NAME:	Copper powder
IDENTIFICATION NOS.:	CAS-no: 7440-50-8 EC-no: 231-159-6
CONTENT:	2.5 - 10%
CLP CLASSIFICATION:	Flam. Sol., Aquatic Acute 1 H228, H400 (M-acute = 1)

NAME:	Phosphorodithioic,acid,mixed,O,O-bis,iso-Bu,and,pentyl,esters,zinc,salts
IDENTIFICATION NOS.:	CAS-no: 68457-79-4 EC-no: 270-608-0
CONTENT:	<1%

CLP CLASSIFICATION: Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 2
H315, H318, H411

(*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.
S = Organic solvent

Other information

N chronic (CAT 2) Sum = Sum(Ci/(M(chronic)i*25)*0.1*10^CATi) = 1,568 - 2,352
N acute (CAT 1) Sum = Sum(Ci/M(acute)i*25) = 0,2368 - 0,3552

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. The doctor can contact The National Poisons Information Service (dial 111, 24 h service).
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

Bring the person into fresh air and stay with him/her.

Skin contact

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure to flush under the upper and lower eyelids. If irritation continues, contact a doctor. 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 victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

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

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

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

Nothing special

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Some metal oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. 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. Aerosols may explode if heated / fire.

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

Avoid inhalation of vapours from spilled material. Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on “Disposal considerations” in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid static electricity.
Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment. See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Storage temperature

< 50°C

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

OEL

Copper powder
Long-term exposure limit (8-hour TWA reference period): - ppm | 0.2(fum)/1(dst) mg/m³
Short-term exposure limit (15-minute reference period): - ppm | 2 (dusts, mists) mg/m³
Comments: Fume/dust

Aluminium powder (stabilised)
Long-term exposure limit (8-hour TWA reference period): - ppm | - mg/m³
Short-term exposure limit (15-minute reference period): - ppm | - mg/m³

Butane (<0,1 % butadiene (203-450-8)
Long-term exposure limit (8-hour TWA reference period): 600 ppm | 1450 mg/m³
Short-term exposure limit (15-minute reference period): 750 ppm | 1810 mg/m³
Comments: Carc (>0,1%butadien) (Carc = Capable of causing cancer.)

DNEL / PNEC

No data available

8.2. Exposure controls

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

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

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

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

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

Keep containment materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Not applicable

Generally

Use only CE marked protective equipment.

Respiratory Equipment

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

Skin protection

No special requirements.

Hand protection

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

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

Form	Aerosol
Colour	Gray
Odour	Characteristic
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm³)	0,63

Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure (20°C)	2100 hPa
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.

Data on fire and explosion hazards

Flash point (°C)	<0
Ignition (°C)	No data available.
Auto flammability (°C)	365
Explosion limits (% v/v)	1,4 - 9,4 v/v%
Explosive properties	No data available.

Solubility

Solubility in water	Insoluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	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 the section “Handling and storage”.

10.3. Possibility of hazardous reactions

Nothing special

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 toxicological effects

Acute toxicity

Substance: zinc oxide
Species: Mouse
Test: LD50
Route of exposure: Oral
Result: 7950 mg/kg

Substance: zinc oxide
Species: Mouse
Test: LC50
Route of exposure: Inhalation
Result: 2500 mg/m3

Substance: zinc oxide
Species: Rat
Test: LD50
Route of exposure: Intraperitoneal
Result: 240 mg/kg

Skin corrosion/irritation

No data available.

Serious eye damage/irritation

No data available.

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Long term effects

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance: Aluminium powder (stabilised)
Species: Daphnia
Test: LC50
Duration: 24 h
Result: 2600 µg/L

Substance: Aluminium powder (stabilised)
Species: Fish
Test: LC50
Duration: 96 h
Result: 120 µg/L

Substance: zinc oxide
Species: Daphnia
Test: LC50
Duration: 48 h
Result: 2600 µg/L

Substance: zinc oxide
Species: Fish
Test: LC50
Duration: 96 h
Result: 1100 µg/L

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
No data available.			

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
Butane (<0,1 % butadiene (203-...	No	2,89	No data available

12.4. Mobility in soil

Butane (<0,1 % butadiene (203-...: Log Koc= 2,366991, Calculated from LogPow (Moderate mobility potential.).

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. 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 due to poor biodegradability, may cause adverse long-term effects to the aquatic environment,

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code	
16 05 04	gases in pressure containers (including halons) containing dangerous substances

Specific labelling

-

Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

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

ADR/RID

14.1. UN number	1950
14.2. UN proper shipping name	AEROSOLS, FLAMMABLE
14.3. Transport hazard class(es)	2.1
14.4. Packing group	-
Notes	-
Tunnel restriction code	D

IMDG

UN-no.	1950
Proper Shipping Name	AEROSOLS, FLAMMABLE
Class	2.1
PG*	-
EmS	F-D, S-U
MP**	yes
Hazardous constituent	Propane, Butane, Copper powder

IATA/ICAO

UN-no.	1950
Proper Shipping Name	AEROSOLS, FLAMMABLE
Class	2.1
PG*	-

14.5. Environmental hazards
This product contains substances, which due to poor biodegradability, may cause adverse long-term effects to the aquatic environment,

14.6. Special precautions for user
-

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No data available

(*) Packing group
(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application
People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education
-

Additional information
Not applicable

Seveso
Seveso III Part 1: P3a, E2

Sources
Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers.
The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.
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 (CLP).
EC regulation 1907/2006 (REACH).
The Control of Major Accident Hazards (COMAH) Regulations 2015.

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.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H336 - May cause drowsiness or dizziness.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.
H411 - 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

Additional label elements


Other
In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture

is based on:
The classification of the mixture in regard of physical hazards has been based on experimental data.
The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)
The classification of the mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)
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.
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.
A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

MJH

Date of last essential change
(First cipher in SDS version)

2017-06-20(2.0)

Date of last minor change
(Last cipher in SDS version)

2017-06-20