

RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ) RS Components

Chemwatch Hazard Alert Code: 2

Issue Date: **25/08/2020** Print Date: **07/09/2020** L.GHS.NZL.EN

Chemwatch: **5422-03** Version No: **2.1.1.1** Safety Data Sheet according to HSNO Regulations

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

Product Identifier			
Product name	RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ)		
Synonyms	Not Available		
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains zinc oxide)		
Other means of identification	Not Available		

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

Relevant identified uses Conductive agents, fillers.

Details of the supplier of the safety data sheet

Registered company name	RS Components
Address	PO Box 12-127 Penrose, Auckland New Zealand
Telephone	+64 27 4747122
Fax	+64 9 579 1700
Website	www.nz.rs-online.com
Email	Not Available

Emergency telephone number

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	+61 2 9186 1132
Other emergency telephone numbers	+64 800 700 112

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 Hazards identification

Classification of the substance or mixture

Classification [1]	Acute Aquatic Hazard Category 1, Chronic Aquatic Hazard Category 1, Acute Vertebrate Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
Gazetted by EPA New Zealand	9.1A. 9.3C

Label elements

Hazard pictogram(s)



Signal word Warning

Hazard statement(s)

H410	Very toxic to aquatic life with long lasting effects.
H433	Harmful to terrestrial vertebrates.

Precautionary statement(s) Prevention

P273 Avoid release to the environment.

Chemwatch: 5422-03 Page 2 of 8

Issue Date: 25/08/2020 Version No: 2.1.1.1 Print Date: 07/09/2020 RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ)

Precautionary statement(s) Response

P391

Collect spillage.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1314-13-2	>60	zinc oxide
Not Available	balance	Ingredients determined not to be hazardous

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

- Absorption of zinc compounds occurs in the small intestine.
- ▶ The metal is heavily protein bound.
- ▶ Elimination results primarily from faecal excretion.
- The usual measures for decontamination (Ipecac Syrup, lavage, charcoal or cathartics) may be administered, although patients usually have sufficient vomiting not to require
- ▶ CaNa2EDTA has been used successfully to normalise zinc levels and is the agent of choice.

[Ellenhorn and Barceloux: Medical Toxicology]

SECTION 5 Firefighting measures

Extinguishing media

- ▶ Foam
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves. Fire Fighting
 - Prevent, by any means available, spillage from entering drains or water courses.
 - ▶ Use water delivered as a fine spray to control fire and cool adjacent area.

Version No: **2.1.1.1**

RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ)

Issue Date: **25/08/2020**Print Date: **07/09/2020**

- Combustible
- ▶ Slight fire hazard when exposed to heat or flame.
- ▶ Heating may cause expansion or decomposition leading to violent rupture of containers.
- lacktriangledown On combustion, may emit toxic fumes of carbon monoxide (CO).

Fire/Explosion Hazard Combustion products include:

carbon dioxide (CO2)

metal oxides

other pyrolysis products typical of burning organic material.

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	Environmental hazard - contain spillage. Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety goggles. Trowel up/scrape up.
Major Spills	 Environmental hazard - contain spillage. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for s	safe handling
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Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. 		
Other information	 Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. 		

Conditions for safe storage, including any incompatibilities

<u> </u>	
Suitable container	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	 Avoid reaction with oxidising agents Avoid strong acids, bases.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	zinc oxide	Zinc oxide fume respirable dust	3 mg/m3	10 mg/m3	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	zinc oxide	Zinc oxide Dust respirable dust	10 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
zinc oxide	Zinc oxide	10 mg/m3	15 mg/m3	2,500 mg/m3
Ingredient	Original IDLH		Revised IDLH	
zinc oxide	500 mg/m3		Not Available	

MATERIAL DATA

Exposure controls

Appropriate engineering	
controls	

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

Chemwatch: 5422-03 Page 4 of 8 Issue Date: 25/08/2020 Version No: 2.1.1.1 Print Date: 07/09/2020

RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ)

The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Personal protection Safety glasses with side shields. Chemical goggles Eye and face protection Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. Skin protection See Hand protection below ▶ Wear chemical protective gloves, e.g. PVC. Hands/feet protection ▶ Wear safety footwear or safety gumboots, e.g. Rubber **Body protection** See Other protection below ▶ Overalls P.V.C apron. Other protection Barrier cream.

Respiratory protection

▶ Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.

Skin cleansing cream

- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	White grease with no odour; partly mixes with water.		
Physical state	Non Slump Paste	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	~7	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	>35	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	>93	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Partly miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Chemwatch: **5422-03** Page **5** of **8**

Version No: **2.1.1.1**

RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ)

Issue Date: **25/08/2020**Print Date: **07/09/2020**

Inhaled	The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.			
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health).			
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.			
Еуе	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).			
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.			
RS-GCS-020-GNS Silicone	TOXICITY	IRRITATION		
Free Grease #915-6105, 915-6109 (NZ)	Not Available	Not Available		
	TOXICITY	IRRITATION		
	600 mg/kg ^[2] Eye		0 mg/24 h - mild	
zinc oxide	Oral (mouse) LD50: 7950 mg/kg ^[2] Eye: no adve		effect observed (not irritating) ^[1]	
	Oral (rat) LD50: >5000 mg/kg ^[1] Skin (rabl		00 mg/24 h- mild	
	Oral (rat) LD50: >8437 mg/kg ^[2] Skin: no advers		e effect observed (not irritating) ^[1]	
Legend:	Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances			
ZINC OXIDE	The material may cause skin irritation after prolonged dermatitis is often characterised by skin redness (ery spongy layer (spongiosis) and intracellular oedema o	thema) and swelling epidermis. Histolo		
Acute Toxicity	×	Carcinogenicity	×	
Skin Irritation/Corrosion	×	Reproductivity	×	
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×	
Respiratory or Skin	×	STOT - Repeated Exposure	×	
sensitisation				

Legend:

X − Data either not available or does not fill the criteria for classification

Data available to make classification

SECTION 12 Ecological information

Toxicity

RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ)	Endpoint	Test Duration (hr)	Species		Value	Source
	Not Available	Not Available	Not Available	Not Available Not Available		Not Available
	Endpoint	Test Duration (hr)	Species	Valu	ıe	Source
zinc oxide	LC50	96	Fish	0.00	1-0.65mg/L	2
	EC50	48	Crustacea	0.00	1-0.014mg/L	2
	EC50	72	Algae or other aquatic plants	0.03	7mg/L	2
	NOEC	72	Algae or other aquatic plants	0.00	1mg/L	2
Legend:	V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US	Registered Substances - Ecotoxicological Info EPA, Ecotox database - Aquatic Toxicity Data apan) - Bioconcentration Data 8. Vendor Data	5. ECETOC Aq	,	

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

On the basis of available evidence concerning either toxicity, persistence, potential to accumulate and or observed environmental fate and behaviour, the material may present a danger, immediate or long-term and /or delayed, to the structure and/ or functioning of natural ecosystems.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air	
	No Data available for all ingredients	No Data available for all ingredients	

Version No: **2.1.1.1**

RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ)

Issue Date: **25/08/2020**Print Date: **07/09/2020**

Bioaccumulative potential

Ingredient	Bioaccumulation
zinc oxide	LOW (BCF = 217)

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 Disposal considerations

Waste treatment methods

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

Product / Packaging disposal

- ► Where in doubt contact the responsible authority.
- ▶ Recycle wherever possible or consult manufacturer for recycling options.
- ► Consult State Land Waste Authority for disposal.
- ▶ Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

SECTION 14 Transport information

Labels Required



Marine Pollutant



HAZCHEM •3Z

Land transport (UN)

UN number	3082		
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains zinc oxide)		
Transport hazard class(es)	Class 9 Subrisk Not Applicable		
Packing group			
Environmental hazard	Environmentally hazardous		
Special precautions for user	Special provisions 274; 331; 335; 375 Limited quantity 5 L		

Air transport (ICAO-IATA / DGR)

UN number	3082			
UN proper shipping name	Environmentally hazardo	Environmentally hazardous substance, liquid, n.o.s. * (contains zinc oxide)		
Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk ERG Code	9 Not Applicable 9L		
Packing group				
Environmental hazard	Environmentally hazardo	us		
Special precautions for user	Special provisions A97 A158 A197 Cargo Only Packing Instructions 964			

Chemwatch: 5422-03 Page **7** of **8**

Version No: 2.1.1.1

RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ)

Issue Date: 25/08/2020 Print Date: 07/09/2020

Cargo Only Maximum Qty / Pack	450 L
Passenger and Cargo Packing Instructions	964
Passenger and Cargo Maximum Qty / Pack	450 L
Passenger and Cargo Limited Quantity Packing Instructions	Y964
Passenger and Cargo Limited Maximum Qty / Pack	30 kg G

Sea transport (IMDG-Code / GGVSee)

UN number	3082	
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains zinc oxide)	
Transport hazard class(es)		9 Not Applicable
Packing group	III	
Environmental hazard	Marine Pollutant	
Special precautions for user	EMS Number Special provisions Limited Quantities	

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 Regulatory information

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

This substance can be managed under the controls specified in the Transfer Notice or alternatively it may be managed using the conditions specified in an applicable Group Standard.

HSR Number	Group Standard
HSR006646	Not Available
zinc oxide is found on the following regulatory lists	

New Zealand Approved Hazardous Substances with controls

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data

New Zealand Inventory of Chemicals (NZIoC) New Zealand Workplace Exposure Standards (WES)

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity (Closed Containers)	Quantity (Open Containers)
Not Applicable	Not Applicable	Not Applicable

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
9.1A, 9.2A, 9.3A, and 9.4A	Any quantity

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status	
National Inventory	Status
Australia - AIIC	Yes
Australia Non-Industrial Use	No (zinc oxide)
Canada - DSL	Yes
Canada - NDSL	Yes
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes

Chemwatch: 5422-03 Page 8 of 8 Issue Date: 25/08/2020 Version No: 2.1.1.1 Print Date: 07/09/2020

RS-GCS-020-GNS Silicone Free Grease #915-6105, 915-6109 (NZ)

National Inventory	Status	
Taiwan - TCSI	Yes	
Mexico - INSQ	Yes	
Vietnam - NCI	Yes	
Russia - ARIPS	Yes	
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)	

SECTION 16 Other information

Revision Date	25/08/2020
Initial Date	25/08/2020

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors

BEI: Biological Exposure Index

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