FRSC Chemical Solutions

SAFETY DATA SHEET

1. Identification

Product identifier Gunk Electric Motor Contact Cleaner - Energized Equipment

Other means of identification

SDS number NM1
Part No. NM1

Tariff code 2903.23.0000

Recommended use Energized Cleaner

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name

Address

RSC Chemical Solutions
600 Radiator Road
Indian Trail, NC 28079

United States

Telephone Customer Service: (704) 821-7643

Technical: (704) 684-1811

Website www.rscbrands.com
E-mail sds@rscbrands.com

Emergency phone number Emergency Telephone: (303) 623-5716

Emergency Contact: RMPDC (877-740-5015)

2. Hazard(s) identification

Physical hazardsFlammable aerosolsNot applicableHealth hazardsSkin corrosion/irritationCategory 2Serious eye damage/eye irritationCategory 2ACarcinogenicityCategory 1Specific target organ toxicity, repeatedCategory 2

exposure

Environmental hazards Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment, Category 1

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye irritation. May cause cancer. May cause damage to

organs through prolonged or repeated exposure. Toxic to aquatic life. Very toxic to aquatic life

with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Response

Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Collect spillage.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information 2.42% of the mixture consists of component(s) of unknown acute hazards to the aquatic

environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Perchlorethylene		127-18-4	97.58
Carbon Dioxide		124-38-9	2.42

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get

medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth. Ingestion

Most important

symptoms/effects, acute and delayed

Dizziness. Headache. Nausea. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

General information

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s)

involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical Special protective equipment

During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

and precautions for firefighters Fire fighting equipment/instructions

Containers should be cooled with water to prevent vapor pressure build up.

Use standard firefighting procedures and consider the hazards of other involved materials. Specific methods

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Store locked up. Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	
Carbon Dioxide (CAS 124-38-9)	PEL	9000 mg/m3	
·		5000 ppm	
US. OSHA Table Z-2 (29 CFR 19	10.1000)		
Components	Туре	Value	
Perchlorethylene (CAS 127-18-4)	Ceiling	200 ppm	
,	TWA	100 ppm	
US. ACGIH Threshold Limit Valu	ies		
Components	Туре	Value	
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm	
,	TWA	5000 ppm	
Perchlorethylene (CAS 127-18-4)	STEL	100 ppm	
,	TWA	25 ppm	
US. NIOSH: Pocket Guide to Cho	emical Hazards		
Components	Туре	Value	
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m3	
,		30000 ppm	
	TWA	9000 mg/m3	
		5000 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Perchlorethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethy lene	Blood	*
	3 ppm	Tetrachloroethy lene	End-exhaled air	*

^{* -} For sampling details, please see the source document.

Exposure guidelines

US - Minnesota Haz Subs: Skin designation applies

Perchlorethylene (CAS 127-18-4)

Skin designation applies.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

wear safety glasses with side shields (or goggles) Eye/face protection

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Other

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece if threshold limits are exceeded.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Liquid **Appearance** Physical state Liquid. Aerosol. **Form** Colorless Color Ether-like. Odor Odor threshold Not available. Not available.

-8.14 °F (-22.3 °C) estimated Melting point/freezing point Initial boiling point and boiling 250.34 °F (121.3 °C) estimated

range

None Flash point **Evaporation rate** 1.7 BuAc Not applicable. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. Vapor pressure 13 mm Hg

Vapor density Not available. Not available. Relative density

Solubility(ies)

Insoluble Solubility (water)

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Density 13.52 lbs/gal estimated

Explosive properties Not explosive.

Flame extension None Flammability (flash back) No

Oxidizing properties Not oxidizing.

Percent volatile 97.58 %

Consider provider 1.62 estimate

Specific gravity 1.62 estimated

VOC 0 %

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stabilityMaterial is stable under normal conditions.Possibility of hazardousHazardous polymerization does not occur.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition Hydrogen chloride.

products

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and

toxicological characteristics

Headache. Dizziness. Nausea. Severe eye irritation. Symptoms may include stinging, tearing,

redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results	
Perchlorethylene (CAS 127	7-18-4)		
<u>Acute</u>			
Dermal			
Liquid			
LD50	Rabbit	> 10000 mg/kg	
Inhalation			
LC50	Mouse	5200 ppm, 4 Hours	
		2978 ppm, 6 Hours	
Liquid			
LC50	Rat	> 20 mg/kg, 4 Hours	
LC50	Rat	5000 ppm, 8 Hours	
		4100 ppm, 6 Hours	
Oral			
LD50	Mouse	6000 mg/kg	

 Components
 Species
 Test Results

 Rat
 2400 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritationCauses skin irritation.

Serious eye damage/eye

Causes serious eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Perchlorethylene (CAS 127-18-4) 2A Probably carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Perchlorethylene (CAS 127-18-4)

Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated

toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may

be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Campananta

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	rest nesuits	
Perchlorethylene (CA	S 127-18-4)			
Aquatic				
Crustacea	EC50	Water flea (Daphnia magna)	6.1 - 9 mg/l, 48 hours	
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	4.82 mg/l, 96 hours	

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Perchlorethylene 3.4

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

Toot Dooulto

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transport information

DOT

UN number Not available.

UN proper shipping name Consumer Commodity, MARINE POLLUTANT

Transport hazard class(es)

ORM-D Class

Subsidiary risk

Not applicable. Packing group

Environmental hazards

Marine pollutant Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

UN1950 **UN number**

UN proper shipping name Aerosols, non-flammable

Transport hazard class(es)

2.2 Class 6.1 Subsidiary risk Packing group Ш **Environmental hazards** Yes

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

aircraft

Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

UN1950 **UN number**

UN proper shipping name Aerosols, MARINE POLLUTANT

Transport hazard class(es)

Class 2.2 Subsidiary risk 6.1

Packing group Not applicable.

Environmental hazards

Marine pollutant Yes F-D. S-U **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not established.

the IBC Code

IATA; IMDG



Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Perchlorethylene (CAS 127-18-4) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
Perchlorethylene	127-18-4	97.58	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Perchlorethylene (CAS 127-18-4)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

Perchlorethylene (CAS 127-18-4)

US. Massachusetts RTK - Substance List

Carbon Dioxide (CAS 124-38-9) Perchlorethylene (CAS 127-18-4)

US. New Jersey Worker and Community Right-to-Know Act

Carbon Dioxide (CAS 124-38-9) Perchlorethylene (CAS 127-18-4)

US. Pennsylvania Worker and Community Right-to-Know Law

Carbon Dioxide (CAS 124-38-9)

Perchlorethylene (CAS 127-18-4)

US. Rhode Island RTK

Perchlorethylene (CAS 127-18-4)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Inventory name

Perchlorethylene (CAS 127-18-4) Listed: April 1, 1988

International Inventories

Country(s) or region

oouna y (o, or rogion	mironio, y namo	• · · · · · · · · · · · · · · · · · · ·
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

 Issue date
 04-29-2015

 Revision date
 06-02-2016

Version # 03

HMIS® ratings Health: 2*

Flammability: 0

Physical hazard: 0

NFPA ratings Health: 2

Flammability: 0 Instability: 0

NFPA ratings



Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge,

information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

Revision information Product and Company Identification: Alternate Trade Names

Exposure controls/personal protection: Eye/face protection Exposure controls/personal protection: Respiratory protection

Physical & Chemical Properties: Multiple Properties Physical and chemical properties: Appearance

GHS: Classification

On inventory (yes/no)*

Yes