MATERIAL SAFETY DATA SHEET

Issue Date: 06/12/2012

Section 1 Product and Company Identification

Product Name; G&G Royal R&O 320

Product Code: 323

Company Identification
G&G Oil Co. of Indiana, Inc.
P.O. Box 71

Muncie, IN 47308

Emergency Phone Number: (765) 288-7795

Section 2 Ingredients

Distillates (petroleum), solvent-refined heavy paraffinic Proprietary additives	Residual Oils (petroleum), Solvent Dewaxed Severaly Solvent refined residuale	
64741-88-4	64742-62-7	CAS#
40-55% 1-5%	45-55%	Percent

Section 3 Hazards Identification

EMERGENCY OVERVIEW

Health Hazards: No known immediate health hazards. Appearance & Odor: Brown liquid. Mild Hydrocarbon Odor

Physical Hazards: No known physical hazards.

NFPA Rating (Health, Fire, Reactivity); 1, 1, 0

Hazard Rating: Least - 0 Sight - 1 Moderate - 2 High - 3 Extreme - 4

Inhalation of vapors (generated at high temperatures only) or oil mist may cause mild irritation of the nose, throat, and respiratory tract.

Eye Irritation: Lubricating oils are generally considered no more than minimally irritating to the eyes.

Lubricating oils are generally considered no more than minimally irritating to the skin. Prolonged and repeated contact may result in defailing and drying of the skin that may cause various skin disorders such as dermatilis,

-ubricating oils are generally no more than slightly toxic if swallowed

Signs and Symptoms: Irritation as noted above.

Aggravated Medical Conditions: Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.

For additional health information, refer to section 11.

Section 4 First Aid Measures

Remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention

Remove contaminated clothing and shoes and wipe excess from skin. Flush skin with water, then wash with soap and water. If inhation occurs, get medical attention. Do not reuse clothing until cleaned.

Flush with water. If irritation occurs, get medical attention

Do not induce vomiting. In general, no treatment is necessary unless large quantities of product are ingested. However, get medical attention.

Note to Physician:

In general, emesis induction is unnecessary in high viscosity, low volatility products such as oils and greases.

Section 5 Fire Fighting Measures

Flash Point [Method]: >400 °F/>204.44 °C [Cleveland Open Cup]

Extinguishing Media:

This material is non-flammable. Material will float and can be re-tignited on surface of water. Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO2) to extinguish flames. Do not use a direct stream of water.

Fire Fighting Instructions:

Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus. This material is non-

Unusual Fire Hazards:

Material may ignite when preheated.

Section 6 Accidental Release Measures

Protective Measures: May burn although not readily ignitable. Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8.

Spill Management:

FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand, or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

Reporting:

CERCLA: Product is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) petroleum exclusion. Releases to air, land, or water are not reportable under CERCLA (Superfund).

CWA: This product is an oil as defined under Section 311 of EPA's Clean Water Act (CWA). Spills into or leading to surface waters that cause a sheen must be reported to the National Response Center, 1-800-424-8802.

Section 7 Handling and Storage

Precautionary Measures:

Wash with soap and water before eating, drinking, smoking, applying cosmetics. Or using toliat. Launder contaminated clothing before reuse. Properly dispose of contaminated leather articles such as shoes or belts that cannot be deconterminated. Avoid heat, open flames, including pilot lights, and strong oxidizing agents. Use explosion-proof ventilation to prevent vapor accumulation. Ground all handling equipment to prevent sparking.

Do not store in open or unlabeled containers. Store in a coot, dry place with adequate ventilation. Keep away from

Container Warnings:

Keep containers closed when not in use. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drilt, weld or perform similar operations on or near containers.

Section 8 Exposure Controls/Personal Protection

	Oil mist, mineral		Oil mist mineral	CHETHCH	Charles
	OSHA PEL	ACCILI LEA		Limit	7
	5 mg/m3	o mg/m3		AWT	,
		10 mg/m3	l	STE	
-			Rining		
			HOUBION		

Decomposition Product	Hydrogen suffice OSHA - PEL IS 10 ppmm	Hydrogen sulfide ACGIH - TLV 10 ppmm	Decomposition Product Limit
	1 1	Í	AWI
O Constitution	15 ppmm		STEL
			Ceiling
		MODERON	All makes of a

Exposure Controls:

Elevated Temperatures

> 180 Degrees F

Provide adequate ventilation to control airborne concentrations below the exposure guidelines/limits

Personal Protection:

Personal protective equipment (PPE) selections vary based on potential exposure conditions such as handling practices, concentration and ventilation. Information on the selection of eye, skin and respiratory protection for use with this material is provided below.

Eye Protection:

Chemical Goggles, or Safety glasses with side shields

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Skin Protection:
Use protective ciothing which is chemically resistant to this material. Selection of protective clothing depends on potential exposure conditions and may include gloves, boots, suits and other items. The selection(s) should take into account such factors as job task, type of exposure and durability requirements

Respiratory Protection:
If engineeting controls do not maintain airborne concentrations to a level which is adequate to protect worker health, if engineeting controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respiration must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Physical and Chemical Properties

Appearance & Odor: Brown liquid. Mild Hydrocarbon Odor. Substance Chemical Family: Lubricants

Flash Point	> 400 °F [Cleveland Odor		Mild Hydrocarbon Odor
	Open Cup		
Pour Point	10 °F20 °F	Specific Gravity	0.88 - 0.9
	[D-0097-00]		

Section 10 Reactivity and Stability

Material is stable under normal conditions.

Conditions to Avoid:

Avoid heat and open flames

Materials to Avoid:

Avoid contact with strong oxidizing agents

Hazardous Decomposition Products:
Thermal decomposition products are highly dependent on combustion conditions. A complex mixture of airborne solids, liquids and gases will evolve when this material undergoes pyrolysis or combustion. Alderhydes, Carbon Monoxide, Carbon Dioxide, Hydrogen Sulfide, Ketonesand other unidentified organic compounds may be formed upon

Section 11 Toxicological Information

		Andrea - Oxigity	
TEST	Result	OSHA	Material Tested
		Classification	
Dermal LDS0	>5.0 g/kg(Rabbit)	ĺ	Based on components(s)
Oral LD50	Ì		Desert of Components(s)
-	TOO GIRGICKALL	Non-l'oxic	Based on components(s)

	Car	cinogenicity C	lassification	
Chemical Name	NTP	IARC	Ë	OSHA
Hydraulic Oil	No.	viewed		No

Section 12 Ecological Information

Environmental Impact Summary:

There is no ecological data available for this product. However, this product is an oil. It is persistent and does not readily biodegrade. However, it does not bioaccumulate.

Section 13 Disposal Considerations

RCRA Information:
Under RCRA, it is the responsibility of the user of the material to determine, at the time of the disposal, whether the material meets RCRA criteria for hazardous waste. This is because material uses, transformations, mixtures, processes, etc. my affect the classification. Refer to the latest EPA, state and local regulations regarding proper

Section 14 Transport Information

US Department of Transportation Classification
This material is not subject to DOT regulations under 49 CFR Parts 171-180.

Oil: This product is an oil under 49CFR (DOT) Part 130. If shipped by rail or highway in a tank with a capacity of 3500 gallons or more, it is subject to these requirements. Mixtures or solutions containing 10% or more of this product may also be subject to this rule.

International Air Transport Association

Not regulated under IATA rules

International Maritime Organization Classification Not regulated under International Maritime Organization rules.

Section 15 Regulatory Information

Product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200, because it carries the occupational exposure limit for mineral oil mist. OSHA Classification:

Federal Regulatory Status

Ozone Depleting Substances (40 CFR 82 Clean Air Act):

This material does not contain nor was it directly manufactured with any Class I or Class II ozone depleting substances.

Superfund Amendment & Reauthorization Act (SARA) Title III: There are no components in this product on the SARA 302 list.

NO	Immediate Health	
NO	Delayed Health	SARA
NO	Fire	Hazard Categoria
NO	Pressure	es (311/312):
S	Reactivity	

SARA Toxic Release Inventory (TRI) (313):

There are no components in this product on the SARA 313 list

Toxic Substances Control Act (TSCA) Status:

All component(s) of this material is (are) listed on the EPATTSCA inventory of Chemical Substances.

Other Chemical Inventories:
Australian AlCS, Canadian DSL, Chinese Inventory, European EINECS, Japan ENCS, Korean Inventory, Philippines

State Regulation

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Section 16 Other Information

Revision Date: 06/12/2012

Revisions since last change (discussion): This Material Safety Data Sheet (MSDS) has been newly reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-1998). We encourage you to take the opportunity to read the MSDS and review the information contained therein.

N/A	Not available
WW	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hyderists Inc.
WEEL	Workplace Environmental Exposure Level
HAZ DES	Hazard Designation
Action Level	A value set by OSHA that is lower than the PEL which will trigger the need for
	activities such as exposure monitoring and medical surveillance if exceeded

Administrative Information

G&G Oil Co. of IN, Inc., urges each customer or racipient of this (M)SDS to study it carefully and consult appropriate expentise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with this product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here perfains only to the product as shipped. Since conditions for use if the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. The underlying data, and the information provided herein as a result of that data, is the property of G&G Oil Co. of IN, Inc. and is not to be the subject of sale or exchange without the express written consent of G&G Oil Co. of IN, Inc. and is not to be the subject of sale or exchange without the express written consent of G&G Oil Co. of IN, Inc.

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