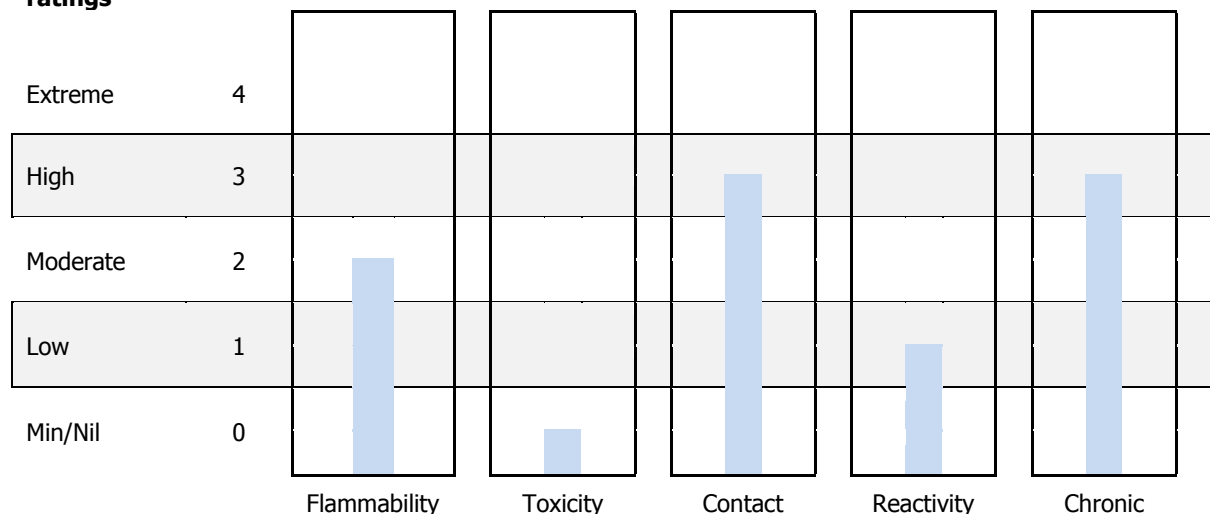


Material Safety Data Sheet

1. Identification of the substance or mixture and of the supplier:

Product name:	Tall oil rosin (SG) & (DG) Gum rosin (WW-WG) OleoRez DR-65 Pine Gum L	
Product identifier/synonyms:	Rosin/Colophony OleoRez DR-65 (tall oil rosin stabilized by catalytic disproportionation)	CAS# 8050—9-7 EC# 232-475-7
Product description:	Complex mixture of resin acids derived from pinewood	
Intended use:	Adhesives, emulsifiers, paper chemicals, ink resins	
Manufacturer:	Industrial Oleochemical Products, (Pty) Ltd., 323 Chamberlain Road, Jacobs, 4052, KZN, South Africa Tel: +27-(0)31-4618680, Fax:: +27-(0)31-461-3743	
Emergency telephone number:	031-461-8721 (Monday-Friday 08.00 to 16.30hr) 031-461-8680 (after normal working hours) 082-852-5383 (medical emergencies)	

Hazard ratings



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2. Hazard identification:

This substance is not classified according to South African National Standard SANS 10234:2007, Globally Harmonized System of classification and labelling of chemicals (GHS).

This substance is classified in the Annex I of Directive 67/548/EEC according to ESIS (European Chemical Substances Information System). It is classified as:-

- **An irritant and a skin sensitizer**

Flammability:

Hazard category	Criteria	Hazard communication elements		
0	Flash point (COC) 230°C	No pictogram required	No signal word required	No warning statement required
No precautionary statements required				

3. Composition/information on ingredients:

Substance/preparation:		Substance			
Ingredient name:	CAS no.	EC no.	%	Exposure limits	
Rosin	8050—9-7	232-475-7	100	TLV (US) 10mg/m ³	TWA (US) none assigned

4. First aid measures:

Inhalation: hot vapours	Remove patient from exposure into fresh air. Keep person warm and at rest. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur. If unconscious, place in a recovery position and get medical attention immediately.
Ingestion:	NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Wash out mouth with water. Remove dentures, if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel, due to risk of aspiration.
Skin contact:	Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes before reuse.
Eye contact:	Remove contact lenses, if any. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Obtain medical attention if irritation persists.
Protection for first-aiders:	No action shall be taken involving any personal risk without suitable training

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5. Fire fighting measures:

Extinguishing media:	Water fog, foam, carbon dioxide, powder
Unsuitable extinguishing media:	Do not use water jet
Special fire-fighting protective equipment:	A self-contained breathing apparatus and suitable protective clothing must be worn in fire conditions with full face piece operated in positive pressure mode
Fire and explosion hazards:	In the solid and molten liquid form, rosin is combustible, but not readily ignited. Molten liquid rosin may combust below its flash point of 230°C if in contact with finely divided material or lagging. Rosin dust/air mixtures can ignite explosively
Combustion products:	Thermal decomposition may produce fumes of carbon monoxide if burning
Explosion data	No data available. However, experience suggests that the substance does not exhibit explosive properties, except in the form of finely divided particles.
Sensitivity to mechanical impact:	Not to be expected
Sensitivity to static discharge:	Fine dust/air mixtures may ignite through static discharge. Systems for handling rosin dust should be electrically grounded.

6. Accidental release measures:

Personal precautions:	<p>For small spills, good working practice suggests that safety goggles, and impervious gloves should be worn to protect eyes and skin.</p> <p>Respiratory protection should not be necessary if adequate ventilation is maintained where hot vapours of this substance are present. Fine dust constitutes a respiratory tract irritant and a face mask should be worn.</p> <p>For large spills, no special personal protective equipment above that required for small spills is required. For spills of molten rosin, clothing which provides full body protection from burns should be worn.</p> <p>For large spills of solid rosin, no special personal protective equipment above that required for small spills is required.</p>
Environmental precautions:	Avoid dispersal of spilt liquid and run-off and contact with soil, waterways, drains and sewers. Material is virtually insoluble in water and floats on water. No data is available for this substance to define it as an environmental hazard.
Clean up methods:	<p>For small spills, allow to solidify on cooling if molten, scoop up material and place in a sealable container for disposal.</p> <p>For large spills, dike spilled molten material or otherwise contain material to ensure runoff does not reach a waterway. Allow to solidify on cooling.</p> <p>Scoop up material and place in a sealable container for disposal.</p> <p>Wash the spillage area with water and detergent.</p> <p>The appropriate regulatory body must be alerted to spillages of uncontrolled discharges into watercourses.</p>

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7. Handling and storage:

Handling:

Ensure the use of personal protective equipment (see Section 8)
Handle and open container with care.

Keep away from heat and sources of ignition. The material is combustible but not classified as flammable.
Wash thoroughly after handling.

Do not eat and drink or smoke while handling this material.

For molten rosin (>200°C) wear protective apron, footwear, spats, face mask and thermally protective gloves

For rosin dust, wear a protective mask and gloves

Note that handling of rosin in solid form may constitute a dust hazard (see Section 5)



Storage:



Store in original containers and keep containers tightly closed until ready for use. Store in a cool, dry, well-ventilated place.

Incompatible materials:

Rosin in contact with un-lined mild steel containers or pipes can result in slow corrosion, depending upon the length of exposure, Darkening of the material may also occur.

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8. Exposure controls/personal protection:

Occupational exposure limit values:					
Chemical name	Type of limit	Limit value		Short-term exposure	
Rosin	TLV (US) 10mg/m ³	No workplace exposure limit assigned	-	No workplace exposure limit assigned	-
Engineering measures:	No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels.				
Eye protection:	Good working practice suggest that safety goggles be used				
Skin protection:	Good working practice suggest that Impervious PVC gloves. overalls/dust coat be used. Rosin dust is a skin sensitizer				
Respiratory protection:	Respiratory protection is not required if good ventilation is maintained.				

9. Physical and chemical properties:

Appearance:	Clear amber solid @ 25°C
Odour:	Slight, terpenic, mild
Odour threshold:	No data
pH:	Not applicable
Melting/freezing point:	80°C
Initial boiling point/range:	>280°C
Flash point:	230°C (closed cup)
Evaporation rate:	>1 (butyl acetate =1)
Flammability:	No data available
Flammable limits:	15g/m³ of rosin dust can ignite explosively
Vapour pressure:	<0.1 hPa (20°C)
Vapour density:	No data available, suggested to be negligible
Relative density:	1.06 (25°C)
Solubility:	Insoluble in water. Soluble in many organic solvents
Partition coefficient n-octanol/water:	No information available
Autoignition temp:	No information available
Decomposition temp:	>300°C
Viscosity:	Molten rosin: 150 mPa.s (100°C)

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10. Stability and reactivity:

Stability:	Stable under normal ambient and anticipated storage and handling conditions. No stabilizers are added or deemed necessary.
Conditions to avoid:	Excessive heating. Dust /air mixtures can ignite explosively
Hazardous reactions:	None known.
Materials to avoid:	Strong oxidizing/reducing agents.
Hazardous decomposition products:	Thermal decomposition will evolve irritant vapours, carbon monoxide and carbon dioxide.
Hazardous polymerization:	Will not occur

11. Toxicological information:


Acute toxicity:

Hazard category	Criteria	Hazard communication elements		
Oral 5	LD ₅₀ oral 2000-5000mg/kg (7600mg/kg)	No symbol required	No signal word required	May be harmful if swallowed
No precautionary statements required				
Dermal 5	LD ₅₀ dermal 2000-5000mg/kg (>2500mg/kg)	No symbol required	No signal word required	May be harmful in contact with skin
No precautionary statements required				
Inhalation Not assigned	LC ₅₀ inhalation no data available	No symbol required	No signal word required	No warning phrase required
No precautionary statements required				

Skin corrosion/irritation:

Hazard category	Criteria	Hazard communication elements		
Irritation 2 (irritant)	Animal test data indicate that the substance causes reversible skin damage	!	Warning	Causes skin irritation

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Serious eye damage/eye irritation:				
Hazard category	Criteria	Hazard communication elements		
Eye 2B (mild irritant)	Animal(rabbit) experience or test data indicate that the substance causes reversible skin damage	No symbol required	Warning	Causes eye irritation
P264 P280 P305+P351+P338 P337+P313	Wash eyes thoroughly after handling Wear protective eye protection IF IN EYES, rinse cautiously with water for several minutes, remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention			
Respiratory sensitizer:				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
	No precautionary statements Note: One case of respiratory asthma has been reported for a worker exposed to unheated rosin dust			
Skin sensitizer:				
Hazard category	Criteria	Hazard communication elements		
1	Human evidence shows that an individual substance can induce sensitization by skin contact in a number of persons		Warning	May cause an allergenic skin reaction
P261 P272 P280 P302+P352 P333+P313 P363 P501	Avoid breathing dust/fumes Contaminated work clothing should not be allowed out of the workplace Wear protective gloves/clothing IF ON SKIN wash with plenty of water If skin irritation or rash occurs, get medical advice/attention Wash contaminated clothing before re-use Dispose of contents/container to a licensed disposal facility			

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Germ cell mutagenicity:				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
Carcinogenicity:				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
Toxic to reproduction:				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
Specific target organ toxicity: single exposure				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
Specific target organ toxicity: repeated exposure				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
Specific target organ toxicity: repeated exposure				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
Aspiration hazard:				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				

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12. Ecological information:

Aquatic toxicity (acute)

Hazard category	Criteria	Hazard communication elements		
Not classified	96hr LC ₅₀ (fish) ≤ 100 mg/L	No symbol required	No signal word required	No hazard statement required
No precautionary statements				

Aquatic toxicity (chronic)

Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				

Persistence and degradability:	Type	Concentration	Degradation
Ready biodegradability	OECD screening test 53% after 28 days	10g/L	The substance is expected to be substantially biodegradable

Bioaccumulative potential:	No information is available
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Mobility in soil:	No information is available
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13. Disposal considerations:

Methods of disposal:	The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material or runoff and contact with soil, waterways, drains, and sewers. Disposal of product should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
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Contaminated packaging:	Empty containers retain product residue. Do not distribute, make available or reuse empty container except for storage and shipment of original product. Remove all product residue from container before disposal according to local regulations.
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Hazardous waste:	This material is not considered harmful to the aquatic environment.
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14. Transport information:

Special precautions for user:

This product is not classified as hazardous goods according to SANAS 10228:2003 **EXCEPT WHEN TRANSPORTED AS A MOLTEN BULK LIQUID**

UN number	U.N. Proper shipping name	Transport hazard class	Packaging group	Environmental hazards	Special precautions
3257	ELEVATED TEMPERATURE LIQUID	9	III	Not regulated	None required

15. Regulatory information:

EU regulations:	Classified "irritant" & "skin sensitizer" (Directive 67/548/EEC). classified (Directive 67/548/EEC).
International regulations: United States (TSCA): Canada (DSL): Australia AICS):	Listed TSCA 8(b): rosin Listed CEPA DSL: rosin No information available
WGK:	1

16. Other information:

This data sheet was prepared in accordance with the Globally Harmonized System of classification and labeling of chemicals (SANS 10234:2007)

Date of preparation:	27 September 2011
Date of previous issue:	5/9/2007
Version:	02 (redesign and up-date)
Compiled by:	J. Crawley (Technical Services Manager)

Notice to reader:

To the best of our knowledge of this substance and on current EC and international regulations, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries or agents assumes liability whatsoever for the accuracy or completeness of the information contained herein.

References:

European Chemical Substances Information System (ESIS)