



SAFETY DATA SHEET

1. Identification

Product identifier	SYLVAROS™ DR 22
Other means of identification	
SDS number	8569
Product Code	200000000090
Recommended use	Industrial uses: Uses of substances as such or in preparations at industrial sites. Formulation [mixing] of preparations and/or re-packaging (excluding alloys).
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company	Arizona Chemical Company LLC
Address	Building 100 4600 Touchton Road East, Suite 1200
City/State	Jacksonville, FL
Zip	32246
Country	USA
Phone Number	904-928-8700
Alternate Phone Number	800-526-5294
Fax Number	904-928-8780
Emergency-US	CHEMTREC 800-424-9300

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Combustible dust
Label elements	
Hazard symbol	None.
Signal word	Warning
Hazard statement	May form combustible dust concentrations in air.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Prevent dust accumulation to minimize explosion hazard. Observe good industrial hygiene practices.
Response	Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Rosin		8050-09-7	100

*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	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Irritation of eyes and mucous membranes. Dusts may irritate the respiratory tract, skin and eyes. Irritation of nose and throat.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Water spray, dry chemical, carbon dioxide. Foam. Dry chemical powder. Carbon dioxide (CO ₂). Apply extinguishing media carefully to avoid creating airborne dust.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Static charges generated by emptying package in or near flammable vapor may cause flash fire. High concentrations of dust may form explosive mixture with air. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Wear suitable protective equipment. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	May form combustible dust concentrations in air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Use only non-sparking tools. Wear appropriate protective equipment and clothing during clean-up. 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	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). The product is immiscible with water and will sediment in water systems. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Explosion-proof general and local exhaust ventilation. Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Keep containers tightly closed in a dry, cool and well-ventilated place. Store at ambient temperature and atmospheric pressure. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Additional components	Type	Value	Form
Dust	PEL	5 mg/m ³ 15 mg/m ³	Respirable fraction. Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Additional components	Type	Value	Form
Dust	TWA	5 mg/m ³ 15 mg/m ³	Respirable fraction. Total dust.

US. ACGIH Threshold Limit Values

Additional components	Type	Value	Form
Dust	TWA	3 mg/m ³ 10 mg/m ³	Respirable particles. Inhalable particles.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. 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.

Individual protection measures, such as personal protective equipment

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

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or 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. Eye wash fountain and emergency showers are recommended.

9. Physical and chemical properties

Appearance Solid.

Physical state Solid.

Form Solid.

Color Amber.

Odor Rosin

Odor threshold Not available.

pH Not available.

Melting point/freezing point	143.6 °F (62 °C) Ring & Ball
Initial boiling point and boiling range	> 572 °F (> 300 °C) (rosin)
Flash point	399.2 °F (204.0 °C) Setafash Closed Cup
Evaporation rate	0 (n-BuAc=1) estimated
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.001 mm Hg at 20°C
Vapor density	Not available.
Relative density	1.05 at 25°C/25°C (water=1)
Solubility(ies)	
Solubility (water)	0.9 mg/l at 20°C.; Data is for similar product.
Partition coefficient (n-octanol/water)	1.9 - 7.7 at 30°C.; Data is for similar product.
Auto-ignition temperature	590 °F (310 °C) (tall oil rosin)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Chemical family	Tall Oil Rosin
Density	1060.00 kg/m3 at 20°C
Dissociation constant	Not available
Percent volatile	0 % by weight. estimated
Softening point	143.6 °F (62 °C) Ring & Ball
Weighted solids	100 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Strong oxidizing agents. Keep away from heat, sparks and open flame. Contact with incompatible materials. Minimize dust generation and accumulation.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Rosin	Irritation Corrosion - Eye, No eye irritation; OECD 405 Result: negative Species: New Zealand white rabbit Organ: Eye Test Duration: 72 hr
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Irritation of eyes and mucous membranes. Dusts may irritate the respiratory tract, skin and eyes.
Upper respiratory tract irritation. Irritation of nose and throat.

Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Components	Species	Test Results
Rosin (CAS 8050-09-7)		
Acute		
<i>Dermal</i>		
LD50	Sprague-Dawley rat	> 2000 mg/kg, 24 hr At this dose no death occurred.; OECD 402
<i>Oral</i>		
LD50	Rat	2800 mg/kg OECD 402
	Sprague-Dawley rat	5000 - 10000 mg/kg, 14 d Data is for similar product.;
NOEL	Sprague-Dawley rat	1000 ppm, 2 wk

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

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Corrosivity

Rosin

Irritation Corrosion - Skin, Non-irritating to the skin.; OECD 404
Result: negative
Species: New Zealand white rabbit
Test Duration: 72 hr

Serious eye damage/eye irritation

Direct contact with eyes may cause temporary irritation.

Eye Contact

Rosin

Irritation Corrosion - Eye, No eye irritation; OECD 405
Result: negative
Species: New Zealand white rabbit
Organ: Eye
Test Duration: 72 hr

Respiratory or skin sensitization

Respiratory sensitization

Not available.

Skin sensitization

This product is not expected to cause skin sensitization.

Skin sensitization

Rosin

Buehler Test, Not a skin sensitizer.; OECD 406
Result: Negative
Species: Guinea pig
Organ: Skin
Local Lymph Node Assay - Lowest Concentration Producing Reaction, Not a skin sensitizer.; OECD 429
Result: Negative
Species: Mouse
Organ: Skin

Germ cell mutagenicity

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

Mutagenicity

Rosin

Ames test, Not mutagenic.; OECD 471;
Result: Negative
Species: Salmonella typhimurium
Chromosome aberration test in vitro, Not mutagenic.; OECD 473;
Result: Negative
Species: Human
In vitro gene mutation study in mammalian cells, Not mutagenic.; OECD 476;
Result: Negative
Species: Mammal

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not available.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Rosin (CAS 8050-09-7)	EC50	Activated sewage sludge	> 10000 mg/l, 3 hr OECD 209;
Aquatic			
Algae	EL50	Green algae (Selenastrum capricornutum)	> 1000 mg/l, 72 hr OECD 201;
Crustacea	EL50	Water flea (Daphnia magna)	911 mg/l, 48 hr OECD 202;

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

Persistence and degradability The product is biodegradable.

Biodegradability

Percent degradation (Aerobic biodegradation)

Rosin 64 % OECD 301B
Result: Readily biodegradable.
Species: Activated sewage sludge
Test Duration: 28 d

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

SYLVAROS™ DR 22 1.9 - 7.7, at 30°C.; Data is for similar product.

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.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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 Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

NFPA ratings Health: 1
Flammability: 1
Instability: 0

NFPA ratings



US state regulations

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

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

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

Not listed.

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

Rosin (CAS 8050-09-7)

US. Rhode Island RTK

Not regulated.

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

Issue date 02-05-2015

Revision date 02-05-2015

Version # 1.0

Further information Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

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