



SAFETY DATA SHEET

1. Identification

Product identifier SYLVAROAD™ RP 1000 Performance Additive

Other means of identification

SDS number 13673

Product Code 200000001616

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 Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The substance does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

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	%
Polyol ester		Proprietary	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	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	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	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.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. 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	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	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. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing 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	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. 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. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	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	Store in original tightly closed container. Keep containers closed when not in use. 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	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
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.
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	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	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	Liquid.
Physical state	Liquid.
Form	Liquid.
Color	Yellow
Odor	Mild
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 572 °F (> 300 °C)
Flash point	534.9 °F (279.4 °C) Cleveland Open Cup (Ambient Conditions); ASTM D92
Evaporation rate	Not available.
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	< 0.1 mPa SPARC v4.6
Vapor density	Not available.
Relative density	0.927 ASTM D1475 at 20°C
Solubility(ies)	
Solubility (water)	0.6 mg/l OECD 105 at 20°C
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	100.8 mm ² /s ASTM D445 at 20°C
Other information	
Pour point	-54.4 °F (-48 °C) ASTM D97

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. Contact with incompatible materials.
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	No adverse effects due to inhalation are expected.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Polyol ester	Irritation Corrosion - Eye, No eye irritation.; Data is for similar product. Result: Negative Species: New Zealand white rabbit Organ: Eye Test Duration: 72 hr Observation Period: 72 hr Notes: OECD 405
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

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

Components	Species	Test Results
Polyol ester		
Acute		
<i>Dermal</i>		
LD50	Sprague-Dawley rat	> 2000 mg/kg, 14 days At this dose no death occurred.; Data is for similar product.; OECD 402.
<i>Inhalation</i>		
LC50	Wistar rat	> 5.22 mg/l, 4 h (As Aerosol); At this dose no death occurred.; Data is for similar product.; OECD 436
<i>Oral</i>		
LD50	Sprague-Dawley rat	> 2000 mg/kg, 14 days At this dose no death occurred.; Data is for similar product.; OECD 423
Subacute		
<i>Dermal</i>		
NOAEL	Sprague-Dawley rat	>= 2000 mg/kg/day, 28 days Data is for similar product.; OECD 411
<i>Oral</i>		
NOAEL	Rat	>= 1000 mg/kg/day, 28 days Data is for similar product.; OECD 407
Subchronic		
<i>Dermal</i>		
NOAEL	Sprague-Dawley rat	>= 2000 mg/kg/day, 6 hours Developmental Effects; Data is for similar product.; OECD 414

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

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Corrosivity

Polyol ester	Irritation Corrosion - Skin, No skin irritation.; Data is for similar product. Result: Negative Species: New Zealand white rabbit Organ: Skin Test Duration: 4 hr Observation Period: 3 days Notes: OECD 404
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Serious eye damage/eye irritation

Direct contact with eyes may cause temporary irritation.

Eye Contact

Polyol ester

Irritation Corrosion - Eye, No eye irritation.; Data is for similar product.
Result: Negative
Species: New Zealand white rabbit
Organ: Eye
Test Duration: 72 hr
Observation Period: 72 hr
Notes: OECD 405

Respiratory or skin sensitization

Respiratory sensitization Not available.

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

Skin sensitization

Polyol ester

Maximisation Assay (Magnusson and Kligman), Not a skin sensitizer.; Data is for similar product.; OECD 406
Result: Negative
Species: Guinea pig
Organ: Skin
Notes: OECD 406

Germ cell mutagenicity

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

Mutagenicity

Polyol ester

In vitro gene mutation study in mammalian cells, This material is considered to be non-clastogenic to human lymphocytes in vitro.; Data is for similar product.; OECD 476
Result: Negative
Species: Mouse
Organ: mammalian cell COMET assay (L5178Y mouse lymphoma cells)
Notes: OECD 476

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.

Chronic effects

No adverse effects due to inhalation are expected.

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
Polyol ester		
<i>Acute</i>		
Other	EL50 Pseudokirchnerella subcapitata	> 110 mg/l, 72 hr >> Water solubility; Data is for similar product.; OECD 201
Aquatic		
<i>Acute</i>		
Crustacea	EL50 Daphnia magna	> 106 mg/l, 48 hr >> Water solubility; Data is for similar product.; OECD 202
Fish	LL50 Danio rerio	> 102 mg/l, 96 hr >> Water solubility; Data is for similar product.; OECD 203

Components	Species	Test Results
<i>Chronic</i> Crustacea	EL50 Daphnia magna	> 0.11 g/l, 21 days >> Water solubility; Data is for similar product.; OECD 211

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

Persistence and degradability The product is biodegradable.

Biodegradability

Percent degradation (Aerobic biodegradation)

Polyol ester

86.6 % CO₂ Evolution Test, Data is for similar product.;
OECD 301B

Result: Readily biodegradable

Species: Activated sewage sludge

Test Duration: 28 days

Bioaccumulative potential Not available.

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.

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 established.

15. Regulatory information

US federal regulations All components are on the U.S. EPA TSCA Inventory List.
This product is not known to be 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)

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 - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

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

Not listed.

US. Rhode Island RTK

Not regulated.

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

Issue date 04-07-2015

Revision date 04-07-2015

Version # 1.0

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