SAFETY DATA SHEET

KRATON

1. Identification

Product identifier SYLVARES™ TP 2040, HOT

Other means of identification

SDS number 13684

Product Code 20000001621

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

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 Contact with hot material can cause thermal burns which may result in permanent damage. At

elevated temperatures, vapor may cause irritation of eyes and respiratory tract.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Terpene Resin		Proprietary	100
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*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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4. First-aid measures

Inhalation If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if

cough or other symptoms develop.

Skin contact If burned by contact with hot material, cool molten material adhering to skin as quickly as possible

with water, and see a physician for removal of adhering material and treatment of burn. Cool skin

rapidly with cold water after contact with molten material.

If hot product contacts eye, flush with water for at least 15 minutes and seek medical attention Eye contact

immediately.

Call a physician or poison control center immediately. Only induce vomiting at the instruction of Ingestion

medical personnel. Never give anything by mouth to an unconscious person.

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.

Get medical attention if symptoms occur. Ensure that medical personnel are aware of the General information

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Water spray, dry chemical, carbon dioxide.

Unsuitable extinguishing

media

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

material(s) involved, and take precautions to protect themselves.

Specific hazards arising from

the chemical

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. Extinguish fires started by molten material by using

appropriate method for the burning material.

Specific methods Extinguish fires started by molten material by using appropriate method for the burning material.

No unusual fire or explosion hazards noted. General fire hazards

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Avoid inhalation of fumes from molten product. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Avoid contact with hot material. For personal protection, see section 8 of the

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. 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 contact with hot material. Avoid breathing vapor from heated material. 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

Biological limit values

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

Appropriate engineering controls

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.

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Individual protection measures, such as personal protective equipment

Eye/face protection Wear a face shield when working with molten material. Wear safety glasses with side shields (or

goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. When handling hot material, use heat resistant

gloves.

Other For molten product, use any type rubber thermal insulating gloves and other clothing as necessary

to protect from thermal burns.

If engineering controls do not maintain airborne concentrations below recommended exposure Respiratory protection

limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved respirator

if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

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

Liquid. **Appearance** Physical state Liquid.

Viscous liquid **Form** Color Light yellow Odor Mild phenolic **Odor threshold** Not available. Not available.

Melting point/freezing point Initial boiling point and boiling

Not available. Not available.

range

399.2 °F (204.0 °C) Setaflash Closed Cup Flash point

Evaporation rate Not available. Not available. 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.

< 0.001 mm Hg at 20°C Vapor pressure

Vapor density Not available.

Relative density 1.05 at 25°C/25°C (water=1)

Solubility(ies)

< 0.1 % at 25°C Solubility (water) Not available. **Partition coefficient**

(n-octanol/water)

460 °C **Auto-ignition temperature**

Decomposition temperature Not available.

3765 cP Brookfield at 150°C **Viscosity**

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Other information

Chemical family Terpene Resin

Density 1050.00 kg/m3 at 20°C

Molecular weight 575 - 600 Percent volatile 0 %

Softening point 244.4 °F (118 °C) Ring & Ball

Weighted solids 100 %

10. Stability and reactivity

Pounds per gallon

ReactivityThe 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

Hazardous polymerization does not occur.

8.5 lb/gal

reactions

Conditions to avoid Strong oxidizing agents. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition Upon

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 Inhalation of vapors/fumes generated by heating this product may cause respiratory irritation with

throat discomfort, coughing or difficulty breathing.

Skin contact Molten material will produce thermal burns.

Eye contact Molten material will produce thermal burns. Fumes released during thermal processing may

cause eye irritation.

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

Components	Species	Test Results
Terpene Resin		
<u>Acute</u>		
Oral		
Solid		
LD50	Rat	> 7000 mg/kg

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

Skin corrosion/irritation Molten material will produce thermal burns.

Serious eye damage/eye Molten mate

irritation

Molten material will produce thermal burns. Fumes released during thermal processing may cause

eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not available.

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

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

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

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

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US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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

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.

Persistence and degradability

Bioaccumulative potential

No data is available on the degradability of this 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.

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.

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14. Transport information

DOT

UN number UN3257

UN proper shipping name Transport hazard class(es) Elevated temperature liquid, n.o.s., at or above 100 C and below its flash point (Terpene Resin)

Class 9 Subsidiary risk 9 Label(s)

Packing group

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

Special provisions

IB1, T3, TP3, TP29

Forbidden

Packaging exceptions None Packaging non bulk None Packaging bulk 247

IATA

UN3257 **UN number**

UN proper shipping name Transport hazard class(es) Elevated temperature liquid, n.o.s. at or above 100°C and below its flash point (Terpene Resin)

9 Class Subsidiary risk

Packing group Not applicable.

Environmental hazards No. 9L **ERG Code**

Other information

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

Passenger and cargo

aircraft

Forbidden Cargo aircraft only

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IMDG

UN3257 **UN** number

ELEVATED TEMPERATURE LIQUID, N.O.S. at or above 100°C and below its flashpoint **UN proper shipping name**

(Terpene Resin)

Not established.

Transport hazard class(es)

9 Class Subsidiary risk Packing group Ш

Environmental hazards

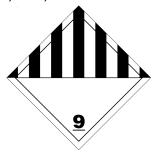
Marine pollutant No. **EmS** F-A, S-P

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

the IBC Code

DOT: IATA: IMDG



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 regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - No **Hazard categories**

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

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 Not regulated.

(SDWA)

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NFPA ratings

Health: 1 Flammability: 1 Instability: 0

NFPA ratings



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

 Issue date
 02-23-2015

 Revision date
 02-15-2017

Version # 2.0

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Revision information Toxicological information: Acute toxicity

Ecological information: Mobility Regulatory Information: United States

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