SAFETY DATA SHEET

KRATON

1. Identification

Product identifier	SYLVARES™ TP 2040
Other means of identification	
SDS number	8572
Product Code	2000000093
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	Kraton Chemical, LLC
Address	P.O. Box 550850
	Jacksonville, FL
Zip	32255-0850
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 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	%
Terpene Phenolic		Proprietary	99-100

*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	Dusts may irritate the respiratory tract, skin and eyes.
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. Foam. Dry chemical powder. Carbon dioxide (CO2). Apply extinguishing media carefully to avoid creating airborne dust.
Unsuitable extinguishing	Do not use water jet as an extinguisher, as this will spread the fire.

mediaSpecific hazards arising from
the chemicalHigh concentration of airborne dust may form explosive mixture with air. Static charges generated
by emptying package in or near flammable vapor may cause flash fire. 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 firefightersSelf-contained breathing apparatus and full protective clothing must be worn in case of fire.Fire fightingIn case of fire and/or explosion do not breathe fumes. Wear suitable protective equipment. More

Fire fightingIn case of fire and/or explosion do not breathe fumes. Wear suitable protective equipment. Moveequipment/instructionscontainers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

May form combustible dust concentrations in air.

6. Accidental release measures

Specific methods

General fire hazards

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Use only non-sparking tools. 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. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
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). 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.
	Never return spills to original containers for re-use.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	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. Keep away from heat/sparks/open flames/hot surfaces No smoking. Explosion-proof general and local exhaust ventilation. 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 containers tightly closed in a dry, cool and well-ventilated place. Store at ambient temperature and atmospheric pressure.

8. Exposure controls/personal protection

Occupational exposure limits

Additional components	Туре	Value	Form
Dust	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Biological limit values	No biological exposure limits noted for	the ingredient(s).	
Appropriate engineering controls	Explosion-proof general and local exha changes per hour) should be used. Ve applicable, use process enclosures, lo maintain airborne levels below recommestablished, maintain airborne levels to	ntilation rates should be mat cal exhaust ventilation, or ot nended exposure limits. If ex	ched to conditions. If her engineering controls to
ndividual protection measures	s, such as personal protective equipme	ent	
Eye/face protection	Wear safety glasses with side shields	(or goggles).	
Skin protection			
Hand protection	Wear appropriate chemical resistant g supplier.	loves. Suitable gloves can be	e recommended by the glove
Other	Wear suitable protective clothing.		
Respiratory protection	If engineering controls do not maintain limits (where applicable) or to an acce been established), an approved respir	ptable level (in countries whe	
Thermal hazards	Wear appropriate thermal protective c	lothing, when necessary.	
General hygiene considerations	When using, do not eat, drink or smok as washing after handling the material wash work clothing and protective equ emergency showers are recommende	and before eating, drinking, ipment to remove contamina	and/or smoking. Routinely

9. Physical and chemical properties

AppearanceSolid.Physical stateSolid.FormFlakes.ColorLight yellow.OdorMild. Phenolic.Odor thresholdNot available.pHNot available.Initial boiling point and boiling rangeNot available.Flash point399.2 °F (204.0 °C) Setaflash Closed CupFlash point399.2 °F (204.0 °C) Setaflash Closed CupFlash point399.2 °F (204.0 °C) Setaflash Closed CupFurmability (solid, gas)Not available.Upper/lower flammability or ex>rusImitial boilsExplosive limit - lower (%)Not available.Vapor densityVol available.Kalaitve density0.001 mm Hg at 20°CVapor densityNot available.Solubility (water)<0.11 % at 25°C (water=1)	•	-
FormFlakes.ColorLight yellow.OdorMid. Phenolic.Odor thresholdNot available.pHNot available.Melting point/freezing pointNot available.Initial boiling point and boiling rangeNot available.Flash point399.2 °F (204.0 °C) Setaflash Closed CupFlash point atte0 (n-BuAc=1) estimatedFlammability (solid, gas)Not available.Upper/lower flammability or ex>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Appearance	Solid.
ColorLight yellow.OdorMild. Phenolic.Odor thresholdNot available.pHNot available.Melting point/freezing pointNot available.Initial boiling point and boiling rangeNot available.Flash point399.2 °F (204.0 °C) Setaflash Closed CupEvaporation rate0 (n-BuAc=1) estimatedFlammability (solid, gas)Not available.Upper/lower flammability or exp:ve limits Explosive limit - lower (%) Explosive limit - lower (%)Not available.Vapor pressure<0.001 mm Hg at 20°C	Physical state	Solid.
OdorMild. Phenolic.Odor thresholdNot available.pHNot available.Melting point/freezing pointNot available.Initial boiling point and boiling rangeNot available.Flash point399.2 °F (204.0 °C) Setaflash Closed CupEvaporation rate0 (n-BuAc=1) estimatedFlammability (solid, gas)Not available.Upper/lower flammability or explosive limit - lower (%) Explosive limit - lower (%)Not available.Vapor pressure<0.001 mm Hg at 20°C	Form	Flakes.
Odor thresholdNot available.pHNot available.Melting point/freezing pointNot available.Initial boiling point and boiling rangeNot available.Flash point399.2 °F (204.0 °C) Setaflash Closed CupEvaporation rate0 (n-BuAc=1) estimatedFlammability (solid, gas)Not available.Upper/lower flammability or explosive limit - lower (%) Explosive limit - lower (%)Not available.Vapor pressure<0.001 mm Hg at 20°C	Color	Light yellow.
pHNot available.Melting point/freezing pointNot available.Initial boiling point and boiling rangeNot available.Flash point399.2 °F (204.0 °C) Setaflash Closed CupEvaporation rate0 (n-BuAc=1) estimatedFlammability (solid, gas)Not available.Upper/lower flammability or explosive limit - lower (%)Not available.Explosive limit - lower (%)Not available.Vapor pressure<0.001 mm Hg at 20°C	Odor	Mild. Phenolic.
Melting point/freezing pointNot available.Initial boiling point and boiling rangeNot available.Flash point399.2 °F (204.0 °C) Setaflash Closed CupEvaporation rate0 (n-BuAc=1) estimatedFlammability (solid, gas)Not available.Upper/lower flammability or explosive limit - lower (%) Explosive limit - lower (%)Not available.Vapor pressure<0.001 mm Hg at 20°C	Odor threshold	Not available.
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rangeFlash point399.2 °F (204.0 °C) Setaflash Closed CupEvaporation rate0 (n-BuAc=1) estimatedFlammability (solid, gas)Not available.Upper/lower flammability or explosive limitsExplosive limit - lower (%)Explosive limit - lower (%)Not available.Explosive limit - upper (%)Not available.Vapor pressure<0.001 mm Hg at 20°CVapor densityNot available.Relative density1.05 at 25°C/25°C (water=1)Solubility(ies)<0.1 % at 25°CPartition coefficientNot available.	Melting point/freezing point	Not available.
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Upper/lower flammability or explosive limits 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) <0.1 % at 25°C Partition coefficient Not available.	Evaporation rate	0 (n-BuAc=1) estimated
Explosive limit - lower (%)Not available.Explosive limit - upper (%)Not available.Vapor pressure<0.001 mm Hg at 20°C	Flammability (solid, gas)	Not available.
Explosive limit - upper (%)Not available.Vapor pressure<0.001 mm Hg at 20°C	Upper/lower flammability or exp	losive limits
Vapor pressure<0.001 mm Hg at 20°C	Explosive limit - lower (%)	Not available.
Vapor densityNot available.Relative density1.05 at 25°C/25°C (water=1)Solubility(ies)<0.1 % at 25°C	Explosive limit - upper (%)	Not available.
Relative density 1.05 at 25°C/25°C (water=1) Solubility(ies) <0.1 % at 25°C Partition coefficient Not available.	Vapor pressure	<0.001 mm Hg at 20°C
Solubility(ies)Solubility (water)<0.1 % at 25°CPartition coefficientNot available.	Vapor density	Not available.
Solubility (water)<0.1 % at 25°C	Relative density	1.05 at 25°C/25°C (water=1)
Partition coefficient Not available.	Solubility(ies)	
	Solubility (water)	<0.1 % at 25°C
		Not available.
Auto-ignition temperature 460 °C	Auto-ignition temperature	460 °C
Decomposition temperature Not available.	Decomposition temperature	Not available.
Viscosity3765 cP Brookfield at 150°C	Viscosity	3765 cP Brookfield at 150°C

Other information	
Chemical family	Terpene Resin
Density	1050.00 kg/m3 at 20°C
Molecular weight	> 575 - < 600
Percent volatile	0 %
Pounds per gallon	8.5 lb/gal
Softening point	244.4 °F (118 °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.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity	Based on available	e data, the classification criteria are not met.	
Components	Species	Test Results	
Terpene Phenolic			
<u>Acute</u>			
Oral			
Solid			
LD50	Rat	> 7000 mg/kg	
* Estimates for product may b	e based on additiona	al component data not shown.	
Skin corrosion/irritation	Prolonged skin cor	ntact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with	eyes may cause temporary irritation.	
Respiratory or skin sensitization	n		
Respiratory sensitization	Not available.		
Skin sensitization	This product is not	expected to cause skin sensitization.	
Germ cell mutagenicity	No data available t mutagenic or geno	to indicate product or any components present at greater than 0.1% are otoxic.	
Carcinogenicity	This product is not	considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
IARC Monographs. Overall	Evaluation of Carcir	nogenicity	
Not listed.			
OSHA Specifically Regulate	d Substances (29 C	CFR 1910.1001-1053)	
Not listed.			
US. National Toxicology Pro	ogram (NTP) Report	t on Carcinogens	
Not listed.			
Reproductive toxicity	•	expected to cause reproductive or developmental effects.	
Material name: SYLVARES™ TP 204			SDS US
8572 Version #: 4.0 Revision date	e: 09-06-2023 Issue da	ate: 01-06-2015	4/7

Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	Not available.
12. Ecological information	
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the
Leotoxicity	possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	
	possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	possibility that large or frequent spills can have a harmful or damaging effect on the environment. No data is available on the degradability of this product.

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	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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 Not applicable. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

All components are either listed on the US EPA TSCA Inventory list and designated as "active" or are exempt from listing.

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 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance Not listed. SARA 311/312 Hazardous Yes chemical

Classified hazard Combustible dust categories

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Issue date	01-06-2015
Revision date	09-06-2023
Version #	4.0
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.
NFPA ratings	Health: 1 Flammability: 1 Instability: 0
NFPA ratings	
Disclaimer	KRATON CORPORATION urges each customer or recipient of this SDS to study it carefully and

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