SAFETY DATA SHEET

1. Identification

Product identifier	**SYLFAT™ FA1**
Other means of identification	
SDS number	8995
Product Code	200000000607
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	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)	After prolonged contact with highly porous materials, this product may spontaneously combust.
Supplemental information	None.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Tall Oil Fatty Acids		61790-12-3	100

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. Foam. Dry chemical powder. Carbon dioxide (CO2).
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	Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away.
Methods and materials for containment and cleaning up	Absorb in vermiculite, dry sand or earth and place into containers. 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. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination. 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	Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material. May auto-oxidize with sufficient heat generation to ignite if spread (as a thin film) or absorbed on porous or fibrous material. Contaminated rags and cloths must be put in fireproof containers for disposal. Avoid prolonged exposure. 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	Do not store in direct sunlight. Store in original tightly closed container. Keep containers closed when not in use. Store at ambient temperature and atmospheric pressure.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Type	Value	Form
Tall Oil Fatty Acids (CAS 61790-12-3)	TWA	5 mg/m3	Oil Mist; Respirable

ACGIH Components	Type	Value	Form
Tall Oil Fatty Acids (CAS 61790-12-3)	STEL	10 mg/m3	Oil Mist; Respirable
	TWA	5 mg/m3	Oil Mist; Respirable

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. Suitable gloves can be recommended by the glove supplier.

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 46.4 °F (8 °C)

Initial boiling point and boiling range Not available.

Flash point 399.2 °F (204.0 °C) Cleveland Open Cup

Evaporation rate 0 (n-BuAc=1) estimated

Flammability (solid, gas) Not available.

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 0.91 at 25°C/25°C; (water=1)

Solubility(ies)

Solubility (water) 12.6 mg/L at 20ºC; Data is for similar product.

Partition coefficient (n-octanol/water) > 4.9 - < 7.6 at 30ºC; Data is for similar product.

Auto-ignition temperature 494.6 °F (257 °C) Data is for similar product.

Decomposition temperature Not available.

Viscosity 20 cP at 25°C

Other information

Chemical family Tall Oil Fatty Acids

Density 905.00 kg/m³ at 20°C

Pounds per gallon 7.53 at 25°C

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. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.
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	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Tall Oil Fatty Acids	Draize Test, No eye irritation. Result: Negative Species: Albino rabbit Organ: Eye Test Duration: 7 days Observation Period: 7 days
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Exposure may cause temporary irritation, redness, or discomfort.

Information on toxicological effects

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

Components	Species	Test Results
Tall Oil Fatty Acids (CAS 61790-12-3)		
Acute		
Dermal		
LD50	Albino rabbit	> 2000 mg/kg, 14 days At this dose no death occurred.
Oral		
LD50	Albino Sprague-Dawley rat	> 10000 mg/kg, 14 days At this dose no death occurred.

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

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Eye Contact

Tall Oil Fatty Acids	Draize Test, No eye irritation. Result: Negative Species: Albino rabbit Organ: Eye Test Duration: 7 days Observation Period: 7 days

Respiratory or skin sensitization

Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.

Skin sensitization

Tall Oil Fatty Acids

Buehler Test, Not a skin sensitizer.
Result: Negative
Species: Guinea pig
Organ: Skin
Notes: OECD 406
Maximisation Assay (Magnusson and Kligman), Not a skin sensitizer.
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

Tall Oil Fatty Acids

Germ Cell Mutagenicity: Ames, No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Result: Negative
Species: Salmonella typhimurium
Notes: OECD 471

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 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

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 Prolonged inhalation may be harmful.

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
Tall Oil Fatty Acids (CAS 61790-12-3)			
	EC50	Bacteria (Pseudomonas putida)	> 10000 mg/l, 16 hr
Aquatic			
Algae	EL50	Green algae (Selenastrum capricornutum)	> 1000 mg/l, 72 hr Growth rate; OECD 201
Crustacea	EL50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hr OECD 202
Fish	LL50	Zebra danio (Danio rerio)	> 10000 mg/l, 96 hr OECD 203

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

Persistence and degradability The product is biodegradable.

Biodegradability

Percent degradation (Aerobic biodegradation)

Tall Oil Fatty Acids

88 - 100 % OECD 301B, CO2 Evolution (Modified Sturm Test),
Species: Activated sewage sludge
Test Duration: 28 d

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

SYLFAT™ FA1

4.9 - 6
4.9 - 7.6 LogKow, at 30ºC; 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.
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 Annex II of MARPOL 73/78 and the IBC Code	Not available.

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Use as animal feed is prohibited in the United States. Similar regulations may restrict such use in other locations.

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 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.

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

Issue date	10-31-2014

Revision date	01-14-2024
Version #	9.0
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 consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information set forth in this document, as of the date of this document, is based on present knowledge, obtained from reliable sources and made to our reasonable ability and in good faith. Such information is made without any warranty or guarantee whatsoever, and shall establish no legal duty or responsibility on the part of the author(s), their employer or its affiliates. The information given is designed only as guidance and its completeness is not guaranteed. The information is not a guarantee of any specific product properties, features, qualities or specifications.

The information relates only to the specific product designated as shipped, and may not be valid for such product used in combination with any other materials or products, or in any process, unless expressly specified in this document. Nothing set forth in this document shall be construed as a recommendation or license to use any product in conflict with, or as claimed by, any existing patents rights. The user alone must finally determine whether a contemplated use of a product will infringe any such patents. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities are in compliance with all Local, Federal and International Legislation and Local Permits.

We, for ourselves and on behalf of our affiliates, expressly disclaim any and all liability for any damages or injuries arising out of any activities relating in any way to the information set forth in this document. Due to the proliferation of sources for information, we are not and cannot be responsible for SDSs obtained from any other source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.

*KRATON, the KRATON logo, the "Green Super Drop" logo, 1101, ABIETA, AQUATAC, BiaXam, BI-THIN, CENTURY, CENWAX, CirKular+, ELEXAR, ELLAMERA, E-LEXAR, HiMA, IMSS, IPD, NEXAR, PER-SUST, PriMul, RAD-THICK, REFLECTAID, REvolution, SYLFAT, SYLVABIND, SYLVABLEND, SYLVACLEAR, SYLVACOTE, SYLVADERM, SYLVAFUEL, SYLVAGEL, SYLVAGUM, SYLVALITE, SYLVAMIN, SYLVAPINE, SYLVAPRINT, SYLVARES, SYLVAROAD, SYLVAROS, SYLVASOLV, SYLVATAC, SYLVATAL, SYLVATRAXX, TER-SET, UNICLEAR, UNIDYME, UNIFLEX, UNI-REZ, UNI-TAC, and ZONATAC are either trademarks or registered trademarks of Kraton Corporation, or its subsidiaries or affiliates, in one or more, but not all countries.

Revision information

Product and Company Identification: Product and Company Identification
Regulatory information: Toxic Substances Control Act (TSCA)
Other information, including date of preparation or last revision: Disclaimer
HazReg Data: Pacific Rim
GHS: Classification