SAFETY DATA SHEET



1. Identification

Product identifier SYLVATAC™ RE 95

Other means of identification

SDS number 8446

Product Code 20000000477

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
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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	%
Resin acids and Rosin acids, esters with pentaerythritol		8050-26-8	100

Material name: SYLVATAC™ RE 95

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contactWash 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.

Dusts may irritate the respiratory tract, skin and eyes.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delayed Indication of immediate

General information

medical attention and special treatment needed

Treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Wa

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). 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

High 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 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 methodsUse 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. 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. 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). 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. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

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

Additional components	Type	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 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

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove Hand protection

supplier.

Wear suitable protective clothing. Other

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.

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

Solid. **Appearance** Physical state Solid.

> Pastilles or Pellets, or Flakes, **Form**

Amber. Color Mild. Odor

Odor threshold Not available. Not available. Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

Flash point

> 500.0 °F (> 260.0 °C) Cleveland Open Cup

0 (n-BuAc=1) estimated **Evaporation rate**

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.

Vapor pressure < 0.001 mm Hg at 20°C

Vapor density Not available.

1.05 OECD 105 at 25°C/25°C; (water=1) Relative density

Solubility(ies)

< 0.1 mg/l at 25°C Solubility (water)

3.6 at 20°C Partition coefficient

(n-octanol/water)

Auto-ignition temperature> 392 °F (> 200 °C)Decomposition temperatureNot available.ViscosityNot available.

Other information

Chemical family Rosin Ester

Density 1050.00 kg/m3 at 20°C

Percent volatile 0 % estimated

Softening point 197.6 - 208.4 °F (92 - 98 °C) Ring & Ball

Weighted solids 100 %

10. Stability and reactivity

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

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.

Resin acids and Rosin acids, esters with pentaerythritol Irritation Corrosion - Eye, No eye irritation.

Result: Negative

Species: New Zealand white rabbit

Organ: Eye Test Duration: 72 hr Observation Period: 7 days

Notes: OECD 405

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 data, the classification criteria are not met.

Components Species Test Results

Resin acids and Rosin acids, esters with pentaerythritol (CAS 8050-26-8)

<u>Acute</u> Dermal

LD50 New Zealand white rabbit > 2000 mg/kg, 14 days At this dose no

death occurred.; OECD 402.

Rabbit > 2000 mg/kg, 24 Hours

Oral

LD50 Rat > 2000 mg/kg

Sprague-Dawley rat > 2000 mg/kg, 14 days At this dose no

death occurred.; OECD 425

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

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

Corrosivity

Resin acids and Rosin acids, esters with

pentaerythritol

Irritation Corrosion - Skin, No skin irritation.

Result: Negative

Species: New Zealand white rabbit

Organ: Skin Test Duration: 4 hr Observation Period: 72 hr

Notes: OECD 404

Serious eye damage/eye

Direct contact with eyes may cause temporary irritation.

irritation

Eye Contact

Resin acids and Rosin acids, esters with

pentaerythritol

Irritation Corrosion - Eye, No eye irritation.

Result: Negative

Species: New Zealand white rabbit

Organ: Eye

Test Duration: 72 hr Observation Period: 7 days

Notes: OECD 405

Respiratory or skin sensitization

Respiratory sensitization Not available.

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

Skin sensitization

Resin acids and Rosin acids, esters with

pentaerythritol

Local Lymph Node Assay - Lowest Concentration Producing

Reaction, Not a skin sensitizer.

Result: Negative Species: Mouse Organ: Skin Notes: OECD 429

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

Resin acids and Rosin acids, esters with

pentaerythritol

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

Germ Cell Mutagenicity: Chromosome Abberation, This material is considered to be non-clastogenic to human

lymphocytes in vitro. Result: Negative Species: Human Notes: OECD 473

In vitro gene mutation study in mammalian cells

Result: Negative Species: Mouse Notes: OECD 476

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)

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

single exposure

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

Specific target organ toxicity -Not available.

Not available.

Specific target organ toxicity repeated exposure

Not available. Aspiration hazard

Further information

Resin acids and Rosin acids, esters with pentaerythritol Cytotoxicity - in Vitro, Not cytotoxic

> Result: Negative Species: Human Organ: Fibroblasts cells Notes: BS 30993-5

Cytotoxicity - in Vitro, Not cytotoxic

Result: Negative Species: Human Organ: Lung cell tissue Notes: BS 5736

Cytotoxicity - in Vitro, Not cytotoxic

Result: Negative Species: Mouse Organ: Fibroblasts cells Test Duration: 72 hr Observation Period: 24 hr

Notes: BS 5736

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Resin acids and Rosin	ո acids, esters with բ	pentaerythritol (CAS 8050-26-8)	
Aquatic			
Algae	EL50	Green algae (Selenastrum capricornutum)	> 1000 mg/l, 72 hr OECD 201
	NOEL	Green algae (Selenastrum capricornutum)	1000 mg/l, 72 hr OECD 201
Crustacea	EL50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hr OECD 202
	NOEC	Water flea (Daphnia magna)	1000 mg/l, 48 hr OECD 202
Fish	LL50	Fathead minnow (Pimephales promelas) > 1000 mg/l, 96 hr OECD 203	
	NOEL	Fathead minnow (Pimephales prome	elas) 1000 mg/l, 96 hr OECD 203

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

Persistence and degradability Not readily degradable.

Biodegradability

Percent degradation (Aerobic biodegradation)

Resin acids and Rosin acids, esters with pentaerythritol 0 % OECD 301B

> Result: Not readily biodegradable. Species: Activated sewage sludge

Test Duration: 28 days

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

SYLVATAC™ RE 95 3.6, at 20°C

Mobility in soil No data available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

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.

Dispose in accordance with all applicable regulations. Local disposal 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).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

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

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)

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

 Issue date
 10-27-2014

 Revision date
 08-11-2022

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



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