SAFETY DATA SHEET
SUPERIOR NO. 99-20

DATE REVISED: January 1, 2018

SECTION 1 -- IDENTIFICATION

Product Name/Part number: Superior No. 99-20
Recommended use: Mildly Activated Rosin Flux, Type RMA

Manufacturer: Superior Flux & Mfg. Co.
6615 Parkland Blvd
Cleveland OH, 44139

Emergency Contact: CHEMTREC
Emergency Phone: 1-800-424-9300
For other info: (440) 349-3000

SECTION 2 – HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with OSHA HCS (29 CFR 1910)

Flammable liquid (Category 2)	H225
Acute toxicity, Oral Category 4)	H302
Aspiration hazard (Category 2)	H305
Acute toxicity, Dermal (Category 3)	H311
Eye irritation (Category 2B)	H320
Acute toxicity, Inhalation (Category 4)	H332
Germ cell mutagenicity (Category 1)	H340
Carcinogenicity (Category 1)	H350
Specific target organ toxicity – Single exposure (Category 1)	H370

See below for full text of H-Statement

GHS Label Elements, including precautionary statements

Pictogram(s):

Signal Word: Danger

Hazard Statement(s)

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H305	May be harmful if swallowed and enters airways
H311	Toxic in contact with skin
H320	Causes eye irritation
H332	Harmful if inhaled
H340	May cause genetic defects
H350	May cause cancer
H370	Causes damage to organs

Precautionary statement(s)

P210	Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P233	Keep container tightly closed
P240	Ground or bond container and receiving equipment
P241	Use explosion-proof electrical, ventilating, lighting, and equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge

P261	Avoid breathing fumes, mists, vapors, or spray
P264	Wash hands and any exposed skin thoroughly after handling
P270	Do not eat, drink, or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves, protective clothing, and eye/face protection
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	If exposed or concerned: Get medical advice or attention.
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P403+P235	Store in a well ventilated place. Keep cool
P405	Store locked up
P501	Dispose of contents and/or container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazards not otherwise classified or not covered by GHS: None

SECTION 3 – COMPOSITION INFORMATION

Components	CAS Number	%
Isopropanol	67-63-0	70-85
Methanol	67-56-1	8-15
Mineral Spirits	8032-32-4	10-15
C-Tab	57-09-0	0.1-3

Unlisted percentages are non-hazardous stabilizers, and water.

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.

Eyes: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most Important Symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2 (labeling)
Medical Conditions Generally Aggravated by Exposure: Any weakness of the lungs, kidneys or liver will be aggravated.

SECTION 5 – FIREFIGHTING MEASURES

Suitable Extinguishing Media: Use dry chemical, carbon dioxide, or alcohol-resistant foam
Special Hazards: Flammable. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Do not mix with strong oxidizing or dehydrating agents. Do not mix with strong oxidizing or dehydrating agents. Do not store in presence of oxidizing agents.
Special protective actions for firefighters: Wear protective clothing, including NIOSH-approved self-contained breathing apparatus

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. *See section 8 for personal protection.*
Environmental Precautions: Prevent further leakage or spillage if safe to do so.
In Case Material is spilled: Contain spillage, absorb with sawdust and place in container for disposal according to local regulations.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid inhalation of vapor or mist. Keep tightly closed in a cool and well-ventilated place.
General Precautions: Do not eat, drink, or smoke while using this product. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.
For full precaution statements see Section 2
Storage Requirements: Keep container tightly closed in a cool and well-ventilated area. Keep away from heat, open flame, electrical sparks, or oxidizing agents.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS
OSHA Permissible Exposure Limit (PEL): 200 ppm
ACGIH Threshold Limit Value (TLV): 200 ppm

Engineering Controls: Use local exhaust ventilation to maintain air concentrations of vapors and fumes below occupational exposure standards.
Special Engineering Control Needs: Explosion proof and non-sparking electrical equipment

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a respirator with multi-purpose combination (USA) or ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face respirator. Use respirators and components tested an approved under appropriate government standards such as NIOSH (USA) or CEN (EU).

Protective Gloves: Handle with gloves. (Nitrile Rubber recommended) Gloves must be inspected prior to use. Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good lab practices. Wash and dry hands after handling.

Eye Protection: Use tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)

Body Protection: Complete suit protecting against chemical, flame retardant protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance	Brown liquid
Odor	Alcohol
Odor threshold	No data available
pH	No data available
Melting point/Freezing point	-88.5°C / -127.3°F
Initial boiling point and boiling range	82.3°C / 180.1°F
Flash point	12°C / 53°F
Evaporation rate (Butyl Acetate = 1)	2.88
Flammability (Solid, gas)	Liquid, gas
Upper flammability or explosive limits	Upper explosion limit: 2%
Lower flammability or explosive limits	Lower explosion limit: 12%
Vapor pressure	33 mmHg
Vapor density (Air = 1)	2.07
Relative density (Water = 1)	0.850
Solubility(ies)	Insoluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	398.9°C / 750°F
Decomposition temperature	No data available
Viscosity	No data available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: No data available
Stability: Product is stable under recommended storage conditions
Possibility of hazardous reactions: No data available
Conditions to Avoid: Heat, sparks, and open flames
Incompatibility: Strong oxidizers
Hazardous Decomposition Products Carbon monoxide (CO), carbon dioxide (CO_2)
In the event of fire: See Section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Route(s) of Exposure: Inhalation, ingestion, skin and eye contact
Symptoms (Immediate and Chronic) from

Acute Exposure No data available
Prolonged or Repeated Exposure No data available

Measure(s) of toxicity

No data available

IARC: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No component of this product is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

SECTION 12 - ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential No data available
Mobility in soil No data available
Other adverse effects No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging Dispose of as unused product.

SECTION 14- TRANSPORTATION

D.O.T. (USA)

Proper Shipping Name: Flammable Liquid, NOS (Contains Isopropanol and Mineral Spirits)

Identification Number: UN1993 **Hazard Class(es):** 3

Packing Group: II **D.O.T. Label Req. Info:** Flammable Liquid

Ground USA: (1-gallon and smaller)

Classified as **ORM-D.** Refer to USA CFR 49 Regulations.

Recommended Shipper be trained and certified.

SECTION 15 - REGULATORY INFORMATION

SARA 302 Components No Chemicals in this material are subject to the reporting requirement of SARA Title III, Section 302.

SARA 311/312 Hazards Acute Health Hazard, Flammable

California Prop. 65 Components

This product contains methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

THIS PRODUCT IS ROHS 3 COMPLIANT

SECTION 16 - OTHER INFORMATION

Further information:

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. The above information does not represent any guarantee of the properties of the product. It is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Reasonable care has been taken in the preparation of this material, and is based on the present state of our knowledge.

Superior Flux & Mfg. Co. shall not be held liable for any damage resulting from handling or from contact with the above product. There are *NO WARRANTIES, NO REPRESENTATIONS AND NO RESPONSIBILITY AS TO THE ACCURACY OR THE SUITABILITY OF THIS INFORMATION FOR ANY PURCHASER'S USE OR FOR ANY CONSEQUENCE TO USE.*

Reference(s):

Sigma-Aldrich – SDS for Isopropanol

Preparation information

Superior Flux & Mfg. Co.
440-349-3000