MATERIAL SAFETY DATA SHEET

Section I – Product Identification

Product Name: Nail Hardener, Nail Whitener, Ridge Filler
Product class: Nail Polish.
Final Use: Nail Care

Section II - Composition / Information on Ingredients

Hazardous Components:

INGREDIENT	CAS NUMBER	HAZARD	HAZARD LETTER SYMBOL	%/ pcs
Butyl Acetate	123-86-4	Flammable	F	
Ethyl Acetate	141-78-6	Highly flammable, irritant	F, Xi	
Nitrocellulose	9004-70-0	Highly flammable	F	1.00 – 1.80 %
Isopropyl Alcohol	67-63-0	Highly flammable, irritant	F, Xi	
N- Butyl Alcohol	71-36-3	Harmful, Flammable	Xn	

Section III - Hazard Identification

Designation of hazard:
Flammable: Vapors form from these products may travel or be moved by air currents and ignited by pilot lights, other flames, sparks, heaters, electrical equipment, static discharges or other ignition sources at location distant from product handling point. This material may produce a floating fire hazard.
Effects of Overexposure: Cause eye irritation. Harmful if swallowed. May cause nose and throat irritation. Causes skin irritation. May effect the brain or nervous systems, causing dizziness, headache or nausea. Harmful if inhaled.
Other effects of overexposure may include: Narcosis, conjunctivitis, loss of coordination, vomiting, lacrimation, redness and swelling of eyes, difficulty with speech, reduced visibility, abdominal pain, swelling and redness of skin, fatigue, cough, dermatitis, drowsiness, unconsciousness.
Primary route(s) of entry: Inhalation, skin contact, eyes, Ingestion.
Medical conditions that can be aggravated : NA
Repeated overexposure to these products may cause: Lung damage, liver abnormalities, kidney damage, central nervous system damage, blood effects. In accordance with 12CFR1910.1200, these products contain no ingredients listed by NTP, IARC or OSHA as carcinogenic.
Notice: Reports have associated repeated and prolonged overexposure to solvent permanent brain and nervous system damage Intentional misuse by deliberately concentrating and inhaling the contents of this package may be harmful of fatal.

Section IV - First Aid Measures

Skin contact: Remove contaminated clothing and wash before reuse. Remove and destroy contaminated shoes. Flush with plenty of water.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention.
Ingestion: Get medical attention IMMEDIATELY
Eye contact: Immediately wash the eyes with plenty of water for at least 10 min holding the eyes open. Obtain medical attention urgently.

Section V - Fire-Fighting Measures

Extinguishing media: Carbon dioxide, Dry chemical, foam.
Unusual file and explosion hazards: During emergency conditions, overexposure to decomposition products may cause a health hazard; symptoms may not be immediately apparent. Obtain medical attention.
Special fire-fighting procedures: Water may be ineffective in fighting fire. If water is used to cool closed containers to prevent pressure build-up, fog nozzles are preferred. Full protective equipment, including self contained breathing apparatus is needed to protect fire-fighters from exposure to coating's hazardous ingredients and hazardous decomposition products.

Section VI - Accidental Release Measures

Step to be taken incase material is released or spilled: Remove all sources of ignition. Wear appropriate safety equipment as listed in section VIII. Absorb on inert material and dispose of as below.
Waste disposal methods: Dispose in accordance with FEDERAL, STATE and local regulations. Incineration is the preferred method of disposal.

Section VII - Handling and Storage

Precaution to be taken in handling and storage: Store in well-ventilated area. Keep container closed when not in use. Store away from ignition source. All equipment should be grounded. Avoid strong oxidizing agents, store in a clean, dry area.
Other precaution: All precautions must be observed. Empty container may retain product residues (vapor or liquid).

Section VIII – Exposure Controls / Personal Protection

Exposure limits:

HAZARDOUS INGREDIENT	CAS NUMBER	DESC	UNIT	VALUE
Butyl Acetate	123-86-4	PEL - TWA	PPM	150
Ethyl Acetate	141-78-6	PEL - TWA	PPM	400
Nitrocellulose	9004-70-0	PEL - TWA	PPM	NA
Isopropyl Alcohol	67-63-0	PEL - TWA	PPM	400
N-Butyl Alcohol	71-36-3	TWA	PPM	50

Personal protection:
***Respiratory protection*:** Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during application and handling unless air monitoring demonstrates vapor / mist levels below applicable limits. Follow respirator manufacturer's recommendations for selection and use.
***Ventilation*:** Sufficient ventilation must be provided to maintain airborne concentrations below TLV limits as listed.
Protective gloves: Chemical resistant protective gloves should be worn when handling this product. Check with glove manufacturer to determine proper glove type.
Eye protection: Splash-proof chemical goggles should be worn.
Other protective equipment: Impervious clothing and boots should be worn. Eye bath and safety shower should be provided.
Hygienic practices: Good personal hygiene practices are required at all times when handling chemicals. These practices include, but are not limited to, washing when safety equipment is removed, at the end of each shift or when going on breaks and especially when contamination occurs.

Section IX – Physical and Chemical Properties

Appearance: Viscous Color Liquid
Odor: Ester
Boiling point: 77^0C at 1013hPa (Ethyl acetate).
Boiling range : 77^0C to 130^0C
Specific gravity: 0.85 – 0.95
Vapor pressure(mm Hg): 100 (27^0C) (Ethyl acetate)
Flash point: -5^0C

Flammable limits:	**Upper**	**Lower**
ethyl acetate	11.0	2.2
butyl acetate	7.6	1.7
isopropyl alcohol	12.0	1.8
n-butyl alcohol	11.2	1.4

pH: Not applicable.
Solubility in water: Insoluble
Evaporation Rate: Slower then ether

Section X – Stability and Reactivity

Material is STABLE under non-emergency conditions.
Material WILL NOT undergo hazardous polymerization.
Hazardous decomposition products: Methane, oxides of nitrogen, carboxylic acids, various hydrocarbons, oxides of carbon, aldehydes, hydrogen cyanide, acids.
Conditions to avoid: Heat, sparks, open flame.
Materials to avoid: Sodium hydroxide, nitric acid, oxidizers, acids, alkali, metal, amines.

Section XI – Toxicological Information

.**Ingredient**	**LD50 (Oral, Rat)**	**LC50 (Inhal, Rat)**	**LC50 (Dermal, Rabbit)**
butyl acetate	14000 mg / Kg	2000 ppm	
ethyl acetate	11300 mg / Kg	1600 ppm (8h)	
isopropyl alcohol	5840 mg / Kg	16000 ppm (8h)	13000 mg / Kg

Ingestion: Important ingestion can cause nausea and a great narcosis with weakness, drowsiness and loss of consciousness.
Inhalation: Can cause irritation of the nose and the throat. At high concentration can cause narcosis.
Contact with the skin: Prolonged contact can cause crack in skin.
Contact with the eye: Can cause irritation of the conjunctive. Can cause injury of the cornea.

Section XII – Ecological Information

Any reject of these products in the sewer or stream must be avoided.

Section XIII – Disposal Considerations

Incinerate in a furnace where permitted under national and local regulations.

Section XIV – Transport Information

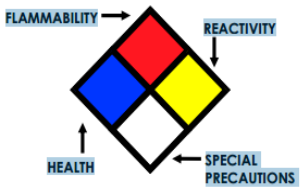
Road transport:
Technical name: Perfumery Products (source of danger: ethyl acetate, butyl acetate, nitrocellulose, isopropyl alcohol)
Class: 3
Pack group: II
Label: 3
Kemler number: 33
UN number: 1266

Maritime transport:
Technical name: Perfumery Products (source of danger: ethyl acetate, butyl acetate, nitrocellulose, isopropyl alcohol)
UN number: 1266
Class: 3
Pack group: II
Ems number: F-E, S-E
Flash point: - 5^0C.

IATA:
Technical name: Perfumery Products (source of danger: ethyl acetate, butyl acetate, nitrocellulose, isopropyl alcohol)
UN number: 1266
Class: 3.
Pack group: II (IP VOL < 1.0L)
Packing instruction: PI 353 (Passenger aircraft) – Maximum Net Quantity per package 5l
PI 364 (Cargo aircraft only)- Maximum Net Quantity per package 60l

Section XV – Regulatory Information

Labelling according to EEC-Directives:
T: Toxic
C: Corrosive
Xn: Harmful
Xi: Irritant



Xn

Harmful

F

Highly flammable

Xi

Irritant

Section XVI – Other Information

Disclaimer: While F.C Co., Ltd believes that the data contained herein are accurate and derived from qualified sources, the data are not be taken as a warranty or representation for which F.C Co., Ltd assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data information must be determined by the user to be in accordance with applicable federal, state and local laws regulations.

F.C Co., Ltd. requires all customers who receive this Security Data Record to study it carefully in order to be informed of any dangers presented by the product. As far as security is concerned the customer should:

- Inform his employees, agents and sub-contractors of information contained in this form.
- Supply one copy of this form to each one of his own customers for this product.
- Ask for these same customers to inform in turn their own employees and customers.

Approved By Managing Director

Nguyen Quang Huy