SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

FES-XX 040

1. Product and company identification

Product identifier

Trade name: **FES-XX 040**

This safety data sheet pertains to the following products:
FES-SW 040, black (10)
FES-BL 040, blue (11)
FES-RT 040, red (12)
FES-GN 040, green (13)
FES-GB 040, yellow (14)
FES-WS 040, white (15)
FES-GBS 040, yellow (16)
FES-LI 040, purple (17)
FES-OR 040, orange (19)
FES-RTB 040, red (20)
FES-BN 040, brown (22)

Relevant identified uses of the substance or mixture and uses advised against

General use: Paint for signature.
Reserved for industrial and professional use.

Details of the supplier of the safety data sheet

Company name: Pannier Corporation
Street/POB-No.: 207 Sandusky Street
Postal Code, city: Pittsburgh, PA 15212
US
WWW: www.pannier.com
E-mail: sales@pannier.com
Telephone: 412-323-4900

Emergency phone number

Infotrac 24-Hour Emergency Response Number 1-800-535-5053

2. Hazards identification

Emergency overview

Appearance: Form: liquid
Color: varying, refer to section 1

Odor: mild, alcoholic

Classification: Flammable Liquid - Category 2; Eye Irritation - Category 2A;

Hazard symbols:

Signal word: **Danger**

Hazard statements:
Highly flammable liquid and vapor.
Can cause serious eye irritation.

Precautionary statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash hands and face thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container to hazardous or special waste collection point.

Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

Potentially explosive mixtures may form if adequate ventilation is not provided.
The product can be absorbed through skin. Inhaling can lead to irritations of the respiratory tract and mucous membrane. Higher doses may have a narcotic effect. Has degreasing effect on the skin. Lengthy or repeated contact may cause skin irritation.
See section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization:

A mixture of binding agent, paint and additives (solution/dispersion).

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 64-17-5	Ethanol	40 - 60 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A.
CAS 67-63-0	Isopropyl alcohol	5 - 10 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 107-98-2	1-Methoxy-2-propanol	1 - 5 %	Flammable Liquid - Category 3. Specific Target Organ Toxicity (Single Exposure) - Category 3.

4. First aid measures

In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen.
Put victim at rest. If unconscious place in recovery position and seek medical advice.

Following skin contact: Thoroughly wash skin with soap and water. Take off contaminated clothing and wash it before reuse.
Do not use solvents or diluting agents for skin cleaning.
In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After swallowing: Rinse mouth. Never give anything by mouth to an unconscious person. Do not induce vomiting.
Keep victim calm and seek medical attention immediately.

Most important symptoms/effects, acute and delayed

Causes serious eye irritation. The product can be absorbed through skin. Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may have a narcotic effect. Has degreasing effect on the skin. Lengthy or repeated contact may cause skin irritation.

Information to physician

Treat symptomatically.

5. Firefighting measures

Flash point/flash point range:
57.2 °F

Auto-ignition temperature:
No data available

Suitable extinguishing media:
Water fog, alcohol resistant foam, powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:
High power water jet

Specific hazards arising from the chemical

Highly flammable liquid and vapor. Vapors form potentially explosive mixtures with air, which are heavier than air. Air-Vapor mixture may travel great distances at floor level and lead to backflash when exposed to an ignition source. In case of fire may be liberated: carbon monoxide and carbon dioxide. During fire: produces thick black smoke that may be hazardous to health.

Protective equipment and precautions for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information: Do not breathe fumes. Do not expose to high temperature. Danger of bursting and explosion. Cool exposed containers with water spray. Cool exposed containers with water spray.
Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions: Eliminate all ignition sources if safe to do so. Wear protective equipment.
Take precautionary measures against static discharges. Keep unprotected people away. Cordon off downwind area at risk and warn inhabitants. Do not breathe vapor or spray. Avoid contact with the substance. Provide adequate ventilation.

Environmental precautions:

Do not empty into drains. Danger of explosion! If necessary notify appropriate authorities.

Methods for clean-up: Take up with non-flammable, liquid binding material (e.g. sand/earth/diatomaceous earth/vermiculite) and perform disposal according to instructions. Clean using cleansing agents. Do not use solvents. In case of release, notify competent authorities.

Additional information: Use only spark proof tools.
Beware of reigniting.

7. Handling and storage

Handling

Advices on safe handling: Avoid generation of vapors/aerosols. Do not breathe vapor or spray. When using do not eat, drink or smoke. Wash hands before breaks and after work. Provide adequate ventilation, and local exhaust as needed. Avoid contact with skin and eyes. Do not allow containers to stand open. Wear protective equipment. Guarantee sufficient ventilation during and after use, in order to prevent vapor accumulation. Take off contaminated clothing and wash it before reuse.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharges.
Use only explosion-protected equipment/instruments. Do not weld.
In partially filled containers explosive mixtures may form.

Storage

Requirements for storerooms and containers:

Storage temperature: 50°F up to 68°F. Keep container tightly closed and in a well-ventilated place. Keep container dry. Keep in a cool place. Provide solvent resistant flooring.

Hints on joint storage: Do not store together with combustible or self-igniting materials or any highly flammable solids. Do not store together with food. Keep away from strong oxidizing agents, strong bases and strong acids.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposures limit values:

CAS No.	Designation	Type	Limit value
64-17-5	Ethanol	USA: ACGIH: TWA	1880 mg/m³; 1000 ppm
		USA: NIOSH: TWA	1900 mg/m³; 1000 ppm
		USA: OSHA: TWA	1900 mg/m³; 1000 ppm
67-63-0	Isopropyl alcohol	USA: ACGIH: STEL	984 mg/m³; 400 ppm
		USA: ACGIH: TWA	492 mg/m³; 200 ppm
		USA: NIOSH: STEL	1225 mg/m³; 500 ppm
		USA: NIOSH: TWA	980 mg/m³; 400 ppm
		USA: OSHA: TWA	980 mg/m³; 400 ppm
107-98-2	1-Methoxy-2-propanol	USA: ACGIH: STEL	369 mg/m³; 100 ppm
		USA: ACGIH: TWA	184 mg/m³; 50 ppm
		USA: NIOSH: STEL	540 mg/m³; 150 ppm
		USA: NIOSH: TWA	360 mg/m³; 100 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
67-63-0	Isopropyl alcohol	USA: ACGIH-BEI, urine	40 mg/L	Acetone in urine	end of shift at end of workweek

Engineering controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment. Explosion protection required.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Wear flame-resistant antistatic protective clothing. Chemical resistant safety shoes

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: Butyl caoutchouc (butyl rubber)-Layer thickness: 0.7 mm.
Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
Use filter type A (= against vapors of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

General hygiene considerations:

Use only non-sparking tools. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Do not breathe vapor or spray. When using do not eat, drink or smoke. Avoid contact with skin and eyes. Take off contaminated clothing and wash it before reuse. After work, wash hands and face. Safety shower and eye wash station should be easily accessible to the work area.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Form: liquid Color: varying, refer to section 1
Odor:	mild, alcoholic
Odor threshold:	no data available
pH value:	no data available
Melting point/freezing point:	no data available
Initial boiling point and boiling range:	no data available
Flash point/flash point range:	57.2°F
Evaporation rate:	no data available
Flammability:	Highly flammable liquid and vapor. Air combined with vapors may form potentially explosive mixtures that are heavier than air.
Explosion limits:	LEL (Lower Explosion Limit): 3.50 Vol-% UEL (Upper Explosive Limit): 15.00 Vol-%
Vapor pressure:	60 hPa
Vapor density:	no data available
Density:	at 68°F: 0.93 g/mL
Solubility:	no data available
Partition coefficient: n-octanol/water:	no data available
Auto-ignition temperature:	no data available
Thermal decomposition:	no data available
Viscosity, kinematic:	18 - 25 s (flow time DIN, 4 mm)
Explosive properties:	Air combined with vapors may form potentially explosive mixtures that are heavier than air.
Ignition temperature:	797°F

10. Stability and reactivity

Reactivity:

Highly flammable liquid and vapor.
Vapors form potentially explosive mixtures with air, which are heavier than air. Air-Vapor mixture may travel great distances at floor level and lead to backflash when exposed to an ignition source.

Chemical stability:

Stable under recommended storage conditions.

Possibility of hazardous reactions

Ignitions by hot surfaces sparks and open flames.
Air combined with vapors may form potentially explosive mixtures that are heavier than air.
Do not expose to high temperature. Danger of bursting and explosion.

Conditions to avoid: Keep away from heat sources, sparks and open flames.
Protect against direct sunlight.

Incompatible materials: Strong oxidizing agents, strong bases, strong acids.

Hazardous decomposition products:
In case of fire may be liberated: carbon monoxide and carbon dioxide. During fire: produces thick black smoke that may be hazardous to health. Exposure to heat may produce hazardous decomposition products.

Thermal decomposition: no data available

11. Toxicological information

Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data.

Eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.

Sensitization to the respiratory tract: Lack of data.

Skin sensitization: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

Other information: Information about Isopropyl alcohol:
Carcinogen Status:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed

Information about Ethanol:
After resorption: The difference between the dose causing loss of consciousness and the dose that will paralyze vital functions such as respiration is small.
Chronic absorption of ethanol will cause liver damage. High concentrations of alcohol in potable alcohol favor development of mouth, oesophagus and stomach cancer.
After absorption of large quantities:
Narcosis, breathing paralysis.

Symptoms

In case of inhalation:
Inhaling can lead to irritations of the respiratory tract and mucous membrane. Vapors in high concentrations have anesthetic effect.
Headache, Dizziness, fatigue, drowsiness, amyosthenia, unconsciousness.

In case of ingestion:
Nausea, vomiting, abdominal pain, gastrointestinal complaints, blood pressure drop.
After contact with skin:
The product can be absorbed through skin. Has degreasing effect on the skin. Lengthy or repeated contact may cause skin irritation.
After eye contact:
The liquid splashed in the eyes may cause irritation or reversible effects.

12. Ecological information

Ecotoxicity

Effects in sewage plants: Information about ethanol:
Activated sludge respiration inhibition test: >15 g/L

Mobility in soil

No data available

Persistence and degradability

Further details: Information about ethanol:
Biodegradation: 94% (OECD 301 E).
Product is readily biodegradable.

Information about Isopropyl alcohol:
Product is readily biodegradable.

Additional ecological information

Volatile organic compounds (VOC):
72% by weight = 700 g/L

General information: Do not allow to enter into ground-water, surface water or drains.

13. Disposal considerations

Product

Recommendation: Dispose of waste according to applicable legislation.
Incinerate as hazardous waste according to applicable local, state, and federal regulations.

Contaminated packaging

Recommendation: Waste key number:
ASN150102 - Plastic packaging
ASN150104 - Metallic packaging

Dispose of waste according to applicable legislation.
Non-contaminated packages may be recycled.

14. Transport information

USA: Department of Transportation (DOT)

Identification numbers:	UN1263
Proper shipping name:	UN 1263, Paint or Paint related material
DOT hazard class or division:	3
PG:	II
Label codes:	3
Special provisions:	149, 367, B52, IB2, T4, TP1, TP8, TP28
Packaging - Exceptions:	150
Packaging - Non-bulk:	173
Packaging - Bulk:	242
Quantity limitations - Passenger aircraft / rail:	5 L
Quantity limitations - Cargo only:	60 L
Vessel stowage - Location:	B

Sea transport (IMDG)

UN number:	UN 1263
Proper shipping name:	UN 1263, Paint
IMDG:	Class 3, Subrisk -
Packing Group:	II
EmS:	F-E, S-E
Special provisions:	163, 367
Limited quantities:	5 L
EQ:	E2
Contaminated packaging - Instructions:	P001
Contaminated packaging - Provisions:	PP1
IBC - Instructions:	IBC02
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T4
Tank instructions - Provisions:	TP1, TP8, TP28
Stowage and handling:	Category B.
Properties and observations:	Miscibility with water depends upon the composition.
Marine pollutant:	no

Air transport (IATA)

UN/ID number:	UN 1263
Proper shipping name:	UN 1263, Paint
ICAO/IATA:	Class 3
PG:	II
Hazard:	Flamm. liquid
EQ:	E2
Passenger Ltd.Qty.:	Pack.Instr. Y341 - Max. Net Qty/Pkg. 1 L
Passenger:	Pack.Instr. 353 - Max. Net Qty/Pkg. 5 L
Cargo:	Pack.Instr. 364 - Max. Net Qty/Pkg. 60 L
Special Provisioning:	A3 A72 A192
ERG:	3L

15. Regulatory information

National regulations - U.S. Federal Regulations

Ethanol:
TSCA Inventory: listed
TSCA HPVC: not listed
NIOSH Recommendations:
Occupational Health Guideline: 0262

Isopropyl alcohol:
TSCA Inventory: listed
TSCA HPVC: not listed
Carcinogen Status:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed
NIOSH Recommendations:
Occupational Health Guideline: 0359

1-Methoxy-2-propanol:
TSCA Inventory: listed
TSCA HPVC: not listed
Clean Air Act:
SOCMI Chemical: yes
NIOSH Recommendations:
Occupational Health Guideline: 0536

National regulations - U.S. State Regulations

Product:

Delaware Air Quality Management List:
DRQ: 5000 - RQ State: Federal Regulations Apply
Idaho Air Pollutant List: Title 585/Title 586: -
Massachusetts Haz. Substance codes: 2,4,5,6 F8 F9
Minnesota Haz. Substance:
Codes: ANO - Ratings: 9.7 - Status: Air Pollutant Title III. TRI.
New Jersey RTK Hazardous Substance:
DOT: 1193 - Sub No.: 1258 - TPQ: -
New York List of Hazardous Substances:
RQ-Air: 5000 - RQ-Land: 1 - Note: No Note Associated with this chemical.
Pennsylvania Haz. Substance code: E
Washington Air Contaminant:
TWA: 200 ppm - 590 mg - STEL: 300 ppm - 885 mg

Isopropyl alcohol:

Idaho Air Pollutant List:
Title 585: AAC: 49 -- EL: 65.3 -- WEL: 980 -Title 586: -
Massachusetts Haz. Substance codes: 2,4,5,6 F9
Minnesota Haz. Substance:
Codes: ANO -- Ratings: 7.84 -- Status: Title III. TRI.
New Jersey RTK Hazardous Substance:
DOT: 1219 - Sub No.: 1076 - TPQ: -
Pennsylvania Haz. Substance code: E
Washington Air Contaminant:
TWA: 400 ppm - 980 mg -- STEL: 500 ppm - 1225 mg

1-Methoxy-2-propanol:

Idaho Air Pollutant List:
Title 585: AAC: 18 - EL: 24 - OEL: 360 - Title 586: -
Massachusetts Haz. Substance codes: 4,6 F8
Minnesota Haz. Substance:
Codes: A - Ratings: 8.12 - Status: -
Pennsylvania Haz. Substance code: -
Washington Air Contaminant:
TWA: 100 ppm - 360 mg - STEL: 150 ppm - 540 mg

Delaware Air Quality Management List:
DRQ: 5000 - RQ State: Federal Regulations Apply
Idaho Air Pollutant List: Title 585/Title 586: -
Massachusetts Haz. Substance codes: 2,4,5,6 F8 F9
Minnesota Haz. Substance:
Codes: ANO - Ratings: 9.7 - Status: Air Pollutant Title III. TRI.
New Jersey RTK Hazardous Substance:
DOT: 1193 - Sub No.: 1258 - TPQ: -
New York List of Hazardous Substances:
RQ-Air: 5000 - RQ-Land: 1 - Note: No Note Associated with this chemical.
Pennsylvania Haz. Substance code: E
Washington Air Contaminant:
TWA: 200 ppm - 590 mg - STEL: 300 ppm - 885 mg

National regulations - Great Britain

Hazchem-Code: •3YE

16. Other information

Text for labeling: Contains 40 - 60% Ethanol, 5 - 10% Isopropyl alcohol, 1 - 5% 1-Methoxy-2-propanol.
Safety data sheet available on request.

Hazard rating systems:

NFPA Hazard Rating:
Health: 1 (Slight)
Fire: 3 (Serious)
Reactivity: 2 (Moderate)

HMIS Version III Rating:
Health: 1 (Slight)
Flammability: 3 (Serious)
Physical Hazard: 2 (Moderate)
Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	3
PHYSICAL HAZARD	2
	X

Reason of change: General revision
Date of first version: 2/9/2016

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.