

1 Identification of substance:

- **Product details:**
- **Trade name:** *TSO-4000 Conditioner*
- **Product number:** 2600-981F
- **Application of the substance / the preparation:** *Ethanol Solution (Ethyl alcohol solution)*
- **Manufacturer/Supplier:**
FoxJet, an ITW Company
1 Missouri Research Park Drive
St. Charles, MO 63304-5685

- Customer Sales & Service:*
800-369-5384 USA
636-300-2188 FAX

- Email: email@foxjet.com*
- **Emergency information:**
Contact Infotrac: (800) 535 5053 (US only)
International: +1 352 323 3500

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** *Mixture of the substances listed below with nonhazardous additions.*

- **Dangerous components:**

78-93-3	methyl ethyl ketone	80-100%
108-65-6	2-methoxy-1-methylethyl acetate	5-20%

3 Hazards identification

- **Hazard description:**



Irritant
Highly flammable

- **Information pertaining to particular dangers for man and environment:**

Highly flammable.
Irritating to eyes and respiratory system.

- **Classification system**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **NFPA Ratings (scale 0-4)**



Health = 2
Fire = 3
Reactivity = 0

- **HMIS Rating (scale 0-4)**



Health - 2
Flammability - 3
Reactivity - 0

- **Routes of Entry**

Ingestion
Inhalation

- **Target Organs:** *Eyes*

- **Irritancy**

Eyes
Respiratory Tract

- **Sensitizing Capability:** *None known*

- **Reproductive Effects:** *None known*

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- **Cancer Information** Not known to be carcinogenic.

4 First aid measures

- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Generally the product does not irritate the skin.
- **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing**
Drink plenty of water. Induce vomiting, if person is conscious. Get immediate medical attention.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling**
- **Information for safe handling:** Store in cool, dry place in tightly closed receptacles.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Maximum storage temperature:** 120 F (49 C)
- **Minimum storage temperature** 35 F (2 C)

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

78-93-3 methyl ethyl ketone

PEL	590 mg/m ³ , 200 ppm
REL	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm
TLV	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm
BEI	

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- **Personal protective equipment**
- **General protective and hygienic measures**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes.
 Avoid contact with the eyes and skin.
- **Breathing equipment:**
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves.

- **Eye protection:**



Tightly sealed goggles.

9 Physical and chemical properties:

· General Information

Form:	Liquid
Color:	Clear
Odor:	Like ketone

· Change in condition

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	79°C (174°F)

· **Flash point:** -4°C (25°F)

· **Ignition temperature:** 315.0°C (599°F)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits:

Lower:	1.5 Vol %
Upper:	11.5 Vol %

· **Vapor pressure at 20°C (68°F):** 105.0 hPa (79 mm Hg)

· **Density at 20°C (68°F):** 0.820 g/cm³

· **Solubility in / Miscibility with Water:** Fully miscible

· Solvent content:

Organic solvents: 100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

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11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

12 Ecological information:

- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Comply with all Federal, State, and Local regulations regarding disposal.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Comply with all Federal, State, and Local regulations regarding disposal.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**



- **Hazard class:** 3
- **Identification number:** UN1193
- **Packing group:** II
- **ERG #** 127
- **Proper shipping name (technical name):** Ethyl methyl ketone (Methyl ethyl ketone)
- **Label** 3

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids
- **Item:** 3b
- **Danger code (Kemler):** 33
- **UN-Number:** 1193
- **Description of goods:** 1193 Ethyl methyl ketone (Methyl ethyl ketone)

- **Maritime transport IMDG:**



- **IMDG Class:** 3.2
- **Page:** 3226-2
- **UN Number:** 1193
- **Label** 3

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- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **MFAG:** 300
- **Marine pollutant:** No
- **Propper shipping name:** Ethyl methyl ketone (Methyl ethyl ketone)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1193
- **Label:** 3
- **Packaging group:** II
- **Propper shipping name:** Ethyl methyl ketone (Methyl ethyl ketone)

15 Regulations

- **Cancerogenity categories**

- **EPA (Environmental Protection Agency)**

78-93-3 methyl ethyl ketone

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- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **Product related hazard information:**

The product has been classified and marked in accordance with directives on hazardous materials.

- **Hazard symbols:**

Irritant

Highly flammable

- **Risk phrases:**

Highly flammable.

Irritating to eyes and respiratory system.

- **Safety phrases:**

Keep out of the reach of children.

Keep container in a well-ventilated place.

Keep away from sources of ignition - No smoking.

Avoid contact with eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed, seek medical advice immediately and show this container or label.

- **National regulations**

- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

- **Other regulations, limitations and prohibitive regulations**

- **OSHA Regulations**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29 CFR 1910.): Not listed

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· **Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, Section 313:**

78-93-3 methyl ethyl ketone

· **CONEG:**

This product has not been tested for heavy metals covered under the various CONEG laws. However, raw materials used to make this product do not contain mercury, lead, cadmium, or hexavalent chromium and none are added during manufacture.

· **Toxic Substances Control Act TSCA Status:**

All components of this product are listed in the EPA's Inventory of Chemical Substances as required under the Toxic Substances Control Act (TSCA).

· **California Proposition 65 (Chemicals known to cause cancer):**

This product contains no ingredients on the California Proposition 65 List known to cause cancer.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **MSDS Created By: J. Wells**

· **Revision Information (All previous revisions obsolete):**

This Revision: 04/11/2002 Updated Company Info.

Previous Revs: 11/3/2000

09/14/1999

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