TRANSTECH

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: Pad Cleaner

MSDS Date: January 28, 2015

Supplier:	ITW Trans Tech 475 North Gary Avenue Carol Stream, IL 60188 USA
General Information:	ph 630-752-4000 www.itwtranstech.com
Emergency phone:	352-323-3500

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

GHS Classification:
Flammable liquids (Category 2)
Acute toxicity, Oral (Category 4)
Acute toxicity, Inhalation (Category 4)
Acute toxicity, Dermal (Category 4)
Carcinogenicity (Category 2)

GHS Labeling

Symbol:

Signal Word: Danger

Hazard Statements:
Highly flammable liquid and vapor
Harmful if swallowed.
Harmful if inhaled.
Harmful in contact with skin.
Suspected of causing cancer

Precautionary Statements:
Prevention:
Avoid breathing mist/vapors/spray.
Do not eat, drink or smoke when using this product.
Do not handle until all safety precautions have been read and understood.
Ground/bond container and receiving equipment.
Keep away from heat/sparks/open flames/hot surfaces-no smoking.
Keep container tightly closed.
Obtain special instructions before use.
Take precautionary measure against static discharge.
Use only non-sparking tools.
Use only outdoors or in a well-ventilated area.
Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.
Response:
Call a poison center/doctor if you feel unwell.
If exposed or concerned: Get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water shower.
If on skin: wash with plenty of water.
If swallowed: Immediately call a poison center/doctor. Rinse mouth.
In case of fire: Use water spray or fog, carbon dioxide, dry chemical powder, or alcohol resistant foam to extinguish.
Take off contaminated clothing and wash it before reuse.
Storage:
Store in a well-ventilated place. Keep cool.
Disposal:
Dispose of contents/container in accordance with local/regional/national/international regulations.

Potential Health Effects: See Section 11 for more information

This product contains carcinogens or potential carcinogens as listed.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: See Section 12 for more information.

Section 3: COMPOSTION/INFORMATION ON INGREDIENTS

No.	Component CAS REG. NO.	Amount %	OSHA		ACGIH	
			TWA	STEL	TWA	STEL
1	**Ethyl Alcohol CAS #64-17-5**	**50-100**	**1000 ppm**	Not Avail	**1000 ppm**	Not Avail
2	**Methyl Isobutyl Ketone CAS# 108-10-1**	**<1**	**50 ppm**	Not Availab le	**50 ppm**	Not Availab le
3	**Methanol CAS #67-56-1**	**1-20**	Not Avail	Not Avail	**200 ppm**	**250 ppm**

Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

Inhalation: If symptoms are experience, remove source of contamination or move victim to fresh air. If affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion: Do not induce vomiting. If the material is swallowed, get medical attention or advice.
Skin: If irritation is experienced, flush with water. If irritation persists, get medical attention.
Eyes: Immediately flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, get medical attention.

Section 5: FIRE FIGHTING MEASURES

Flash Point: (ethyl alcohol) 13°C (55.4°F)
Auto-ignition Temperature: (ethyl alcohol) 363°C (685.4°F)
Lower Explosion Limit: (ethyl alcohol) 3.3%
Upper Explosion Limit: (ethyl alcohol) 19.0%
Flammability Classification: Class IB Flammable Liquid

Suitable Extinguishing Media:
Use methods appropriate for the surrounding fire. Consider water spray or fog, carbon dioxide, dry chemical powder, or alcohol resistant foam.

Products of Combustion:
Upon decomposition this product may emit carbon dioxide, carbon monoxide, and/or low molecular weight hydrocarbons.

Fire Fighting Equipment/Instructions:
Wear protective clothing and equipment suitable for the surrounding fire, including helmet, facemask, and self contained breathing apparatus.

HAZARD	HMIS	NFPA
Toxicity	2	2
Fire	3	3
Reactivity	0	0

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: For large spills wear gloves, Tyvek suits, safety glasses, and appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Special Properties: Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.

Environmental Precautions: Prevent discharge to open bodies of water, municipal sewers, and watercourses.

Method for Containment: Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth.

Methods for Clean-up: Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container. Wash spill area with water.

Section 7: HANDLING AND STORAGE

Handling:
Keep away from heat, sparks and flame. Use only with adequate ventilation.
To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Storage:
Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protective Equipment (PPE)

Respiratory Protection: Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Eye/Face Protection: Safety glasses with side shields are recommended as minimum protection in industrial settings.

Hand Protection: Butyl rubber gloves

Body: Avoid skin contact. If product comes in contact with clothing, immediately remove soaked clothing and shower.

Other Protective Equipment:
Facilities storing or utilizing this material should be equipped with eyewash and safety shower facilities.

See section 3 for exposure limits.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance, State	Clear liquid
Color	Colorless
Odor	Not available
pH (1%soln/water)	Not Available
Vapor Density (Ethyl Alcohol)	1.6
Boiling Point (Ethyl Alcohol)	78.5°C
Vapor Pressure (Ethyl Alcohol)	57.3 hPa at 20°C
Melting Point (Ethyl Alcohol)	-114.1°C
Freezing Point (Ethyl Alcohol)	Not Available
Flash Point (See Section 5)	
Flammability Properties (See section 5)	
Solubility (in water)	Soluble
Specific Gravity (Ethyl Alcohol)	0.78-0.8
Evaporation Rate	Not Available
Octanol/Water partition coefficient (Kow) (Ethyl Alcohol) -0.32	
Auto-ignition temperature: (Ethyl Alcohol) 363°C	
Decomposition temperature:	Not Available
Viscosity	Not Available
Decomposition Temperature	Not Available

Section 10: STABILITY AND REACTIVITY

Stability: This material is considered stable at ambient temperatures 70°C (21°C).

Condition to Avoid: Flames, sparks, electrostatic discharge, heat and other ignition sources.

Incompatible Materials: This product reacts with strong acid, strong bases, and oxidizing agents.

Hazardous Decomposition: Upon decomposition, this product evolves carbon monoxide, carbon dioxide, and/or low weight hydrocarbons.

Hazardous Reactions: This product will not undergo polymerization.

Section 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:
Analysis LD50

Methanol (67-56-1)

Draize test, rabbit, eye: 40 mg Moderate;
Draize test, rabbit, eye: 100 mg/24H Moderate;
Draize test, rabbit, skin: 20 mg/24H Moderate;
Inhalation, rat: LC50 = 64000 ppm/4H;
Oral, mouse: LD50 = 7300 mg/kg;
Oral, rabbit: LD50 = 14200 mg/kg;
Oral, rat: LD50 = 5628 mg/kg;
Skin, rabbit: LD50 = 15800 mg/kg

Ethyl Alcohol (64-17-5)
Oral LD50 Rat: 7060 mg/kg

Methyl Isobutyl Ketone (108-10-1)
Oral: Rat LD50 = 1600-3200 mg/kg
Dermal: Rabbit LD50 = >10 ml/kg
Inhalation: Rat LC50 = 2000-4000 ppm/4 hr

CHRONIC EFFECTS:

Ethyl Alcohol (64-17-5)
Carcinogenic Effects: A4 - Not classifiable for human or animal by ACGIH.
Mutagenic Effects: Not Available.
Teratogenic Effects: Not Available.
Developmental Toxicity: Ethyl alcohol is a developmental toxin when consumed during pregnancy
Target Organs: When consumed, ethyl alcohol can target the respiratory system, skin, eyes, CNS, liver, blood, and reproductive system. **Inhalation**: May cause irritation to the mucous membranes of the upper respiratory tract. Exposure over 1000 ppm may cause headache, drowsiness, lassitude, loss of appetite, inability to concentrate, throat irritation **Ingestion**: Can cause depression of Central Nervous System, nausea, vomiting, diarrhea, intoxication, and in acute cases, death **Eye**: Liquid and vapor may cause irritation. Splashes may cause temporary pain and blurred vision **Skin**: May cause irritation, cracking, flaking, and defatting of skin on prolonged contact **Chronic Exposure**: Prolonged skin contact causes drying and cracking of skin. May affect nervous system, liver, blood, reproductive system. **Signs and Symptoms:** Headache, drowsiness, lassitude, loss of appetite, inability to concentrate, irritation of throat/eye/skin, depression of central nervous system, nausea, vomiting, diarrhea, skin defatting.

Methanol (67-56-1)
Carcinogenic Effects: Not available
Mutagenic Effects: Laboratory experiments have resulted in mutagenic effects.
Teratogenic Effects: Chronic exposure may cause reproductive disorders and teratogenic effects.
Developmental Toxicity: Chronic exposure may cause reproductive disorders.
Target Organs: Eyes, CNS, skin, GI tract, and respiratory system. **Inhalation:** An irritant to the mucous membranes. Toxic effects exerted upon nervous system, particularly the optic nerve. Once absorbed into the body, it is very slowly eliminated. Symptoms of over-exposure may include headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma, and death. A person may get better but then worse up to 30 hours later.
Ingestion: Toxic. Symptoms similar to those for inhalation, but severity and speed of appearance may be greater. May be fatal or cause blindness. Usual fatal dose: 100 – 125 ml. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.
Skin Contact: Methyl Alcohol is a defatting agent and may cause skin to become dry and cracked. Skin absorption can occur in harmful amounts; symptoms may parallel inhalation exposure.
Eye Contact: Irritant, characterized by a burning sensation, redness, tearing, inflammation, possible corneal injury, painful sensitization to light. Continued exposure may cause lesions.
Chronic Exposure: Marked impairment of vision has been reported. Repeated or prolonged skin contact may cause dermatitis. Chronic exposure may cause reproductive disorders and teratogenic effects. Laboratory experiments have resulted in mutagenic effects.

Methyl Isobutyl Ketone (108-10-1)
Carcinogenicity: IARC: 2B - Group 2B: Possibly carcinogenic to humans (4-Methylpentan-2-one)
Neurotoxicity: No information available
Mutagenicity: No information available
Reproductive: No information available
Developmental: Developmental Toxicity - mouse - Inhalation
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Embryo or Fetus: Fetal death. Developmental Toxicity - mouse – Inhalation Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities:
Musculoskeletal system. Specific Developmental Abnormalities: Cardiovascular (circulatory) system.
Target Organs: Result: Mild skin irritation - 24 h. Result: Moderate eye irritation - 24 h. May cause respiratory irritation. Blurred vision, Dermatitis.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Ethyl Alcohol (64-17-5)
96 hour LC50 Oncorhynchus mykiss: 12,900 mg/L (flow-through) (30days old)
96 hour LC50 Pimephales promelas 14.2 mg/L
5 min EC50 Photobacterium phosphoreum: 35,470 mg/L
30 min EC50 Photobacterium phosphoreum: 34,634 mg/L
48 hour EC50 Daphnia magna: 9,268 mg/L
24 hour EC50 Daphnia magna: 10,800 mg/L

Ecotoxicity: Methanol (67-56-1)
EC50 (48 h) : 13,200 mg/l Species : Rainbow trout (Oncorhynchus mykiss).
EC50 (48 h) : 16,000 mg/l Species : Bluegill sunfish (Lepomis macrochirus).
EC50 (48 h) : > 10,000 mg/l Species : Daphnia

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

Proper Shipping Name: Alcohols, n.o.s.
Hazard Class: 3
Identification No.: UN1987
Packing Group: II
Label: Flammable Liquid

Section 15: REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

SARA 302/304 The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically

designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: Methanol 5,000 lbs, Methyl Isobutyl Ketone 5,000 lbs

SARA 313: Methanol, Methyl Isobutyl Ketone

SARA 311/312 Hazard The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard

California Prop 65: Methyl isobutyl ketone cancer and developmental hazard, Methanol developmental hazard

Section 16: OTHER SUPPLEMENTAL INFORMATION

Disclaimer:
The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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