

## SAFETY DATA SHEET

Preparation Date: 8/26/2015

Revision Date: 8/26/2015

Revision Number: G1

### 1. IDENTIFICATION

**Product identifier**

**Product code:** P-358  
**Product Name:** PAN, 0.1 PERCENT (W/V) INDICATOR SOLUTION IN METHANOL

**Other means of identification**

**Synonyms:** No information available  
**CAS #:** Mixture  
**RTECS #** Not available  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** Indicator. Complexometry. Research and Development. Laboratory reagent.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

### 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Gases)	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Serious eye damage/eye irritation	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 2

**Label elements**

## Danger

### Hazard statements

Toxic if swallowed  
Toxic in contact with skin  
Toxic if inhaled  
Causes serious eye irritation  
Suspected of damaging fertility or the unborn child  
Causes damage to organs  
Causes damage to organs through prolonged or repeated exposure  
Highly flammable liquid and vapor



### Hazards not otherwise classified (HNOC)

Not Applicable

### Other hazards

Can burn with an invisible flame  
May cause blindness if swallowed  
Causes mild skin irritation

### Precautionary Statements - Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wear protective gloves/protective clothing/eye protection/face protection  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray  
Keep away from heat/sparks/open flames/hot surfaces. — 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  
Keep cool

### Precautionary Statements - Response

*IF exposed or concerned: Get medical advice/attention*

**Product code:** P-358

**Product name:** PAN, 0.1 PERCENT  
(W/V) INDICATOR SOLUTION IN  
METHANOL

2 / 16

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish.

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.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

#### Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Methyl Alcohol 67-56-1	67-56-1	99.9
P.A.N 85-85-8	85-85-8	0.1

### 4. FIRST AID MEASURES

#### First aid measures

##### General Advice:

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

##### Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention.

##### Eye Contact:

Flush eyes with water for 15 minutes. Get medical attention.

##### Inhalation:

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

##### Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Toxic if swallowed. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

#### Most important symptoms and effects, both acute and delayed

##### Symptoms

Causes eye irritation. Causes skin irritation. Central nervous system effects. Drowsiness. Dizziness. Headache. Pupillary dilation. Rapid eye movement. Increased sensitivity to light. Visual disturbances. May cause blindness. May cause metabolic acidosis. Dyspnea (Difficulty breathing and shortness of breath). Abdominal pain. Nausea. Vomiting.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:**

This product contains Methyl Alcohol.

For Methyl Alcohol Ingestion:

1. Support vital functions, correct for dehydration and shock, and manage fluid balance.
2. The currently recommended medical management of Methanol poisoning includes the following methods:
  - a. Emptying the stomach by gastric lavage. It is useful if initiated within < 1 of ingestion.
  - b. Correct metabolic acidosis with intravenous administration of sodium bicarbonate, adjusting the administration rate according to repeated and frequent measurement of acid/base status.
  - c. Administer ethanol (orally or by IV (intravenously)) or Fomepizole (4-methylpyrazole or Antizol)) therapy by IV (intravenously) as an antidote to inhibit the formation of toxic metabolites. Adjunct therapy with Leucorvin followed by Folate can also be initialized. Please note that if Ethanol therapy is used, monitor blood glucose, especially in children. Ethanol can cause hypoglycemia.
  - d. When patients are diagnosed and treated early in the course with the above methods, hemodialysis may be avoided if fomepizole or ethanol therapy is effective, and the metabolic acidosis is corrected, and no renal failure is present. However, once severe acidosis and renal failure occurred, hemodialysis is necessary. Hemodialysis is effective in removing Methyl alcohol and toxic metabolites, and correcting metabolic acidosis.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media:**

Carbon dioxide (CO2). Dry chemical. Alcohol-resistant foam. Water spray.

**Unsuitable Extinguishing Media:**

Do not use a solid (straight) water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

**Hazardous Combustion Products:**

Carbon monoxide; Carbon dioxide

**Specific hazards:**

Flammable  
May be ignited by heat, sparks or flames  
Container explosion may occur under fire conditions or when heated  
Material can burn with invisible flame  
Vapor may travel considerable distance to source of ignition and flash back  
Vapors may form explosive mixtures with air  
Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks)  
Fire may produce irritating, corrosive and/or toxic gases

**Special Protective Actions for Firefighters**

**Specific Methods:**

Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

**Special Protective Equipment for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

#### **Safe Handling Advice**

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

#### **Incompatible Materials:**

Oxidizing agents. Acids. Metals. Alkali Metals. Alkaline Earth metals. Aluminum. Zinc. Acid chlorides. Acid anhydrides. Chlorine. chromium trioxide . Potassium t-butoxide. Chromic anhydride. Beryllium hydride. Acetyl bromide. Phosphorous trioxide. Dichloromethane. Chloroform + Sodium methoxide.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **National occupational exposure limits**

##### **United States**

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
------------	------	-------	-------	------------

Methyl Alcohol 67-56-1	200 ppm TWA 260 mg/m <sup>3</sup> TWA	200 ppm TWA 260 mg/m <sup>3</sup> TWA 250 ppm STEL 325 mg/m <sup>3</sup> STEL	250 ppm STEL 200 ppm TWA	Not determined
P.A.N 85-85-8	None	None	None	None

### Canada

Components	Alberta	British Columbia	Ontario	Quebec
Methyl Alcohol 67-56-1	200 ppm TWA 262 mg/m <sup>3</sup> TWA 250 ppm STEL 328 mg/m <sup>3</sup> STEL	200 ppm TWA 250 ppm STEL	200 ppm TWA	200 ppm TWAEV 262 mg/m <sup>3</sup> TWAEV 250 ppm STEV 328 mg/m <sup>3</sup> STEV
P.A.N 85-85-8	None	None	None	None

### Australia and Mexico

Components	Australia	Mexico
Methyl Alcohol 67-56-1	250 ppm STEL 328 mg/m <sup>3</sup> STEL 200 ppm TWA 262 mg/m <sup>3</sup> STEL	200 ppm TWA 260 mg/m <sup>3</sup> TWA 250 ppm STEL 310 mg/m <sup>3</sup> STEL
P.A.N 85-85-8	None	None

### Appropriate engineering controls

#### Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

**Eye protection:** Goggles.

**Skin and body protection:** Chemical resistant apron. Long sleeved clothing. Gloves.

**Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid.	<b>Appearance:</b> Clear.	<b>Color:</b> Clear. Colorless.
<b>Odor:</b> Alcoholic. Pungent.	<b>Taste</b> No information available	<b>Formula:</b> No information available
<b>Molecular/Formula weight:</b> No information available	<b>Flammability:</b> Highly Flammable	<b>Flash point (°C):</b> For Methyl Alcohol: 11
<b>Flashpoint (°C/°F):</b> For Methyl Alcohol: 11-12.2 °C/51.8-54 °F 15.6-16.1 °C/60.1-61°F	<b>Flash Point Tested according to:</b> Closed cup Open cup	<b>Autoignition Temperature (°C/°F):</b> For Methyl Alcohol: 464°C/867°F
<b>Lower Explosion Limit (%):</b> For Methyl Alcohol: 6%	<b>Upper Explosion Limit (%):</b> For Methyl Alcohol: 36.5%	<b>pH:</b> No information available
<b>Melting point/range(°C/°F):</b> For Methyl alcohol: -97.8 °C/-144 °F	<b>Boiling point/range(°C/°F):</b> For Methyl alcohol: 64-65 °C/147.2-149 °F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> For Methyl alcohol: 0.79	<b>Specific gravity:</b> For Methyl alcohol: 0.7866-0.7915
<b>Vapor pressure @ 20°C (kPa):</b> For Methyl Alcohol: 12.3-12.8	<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> For Methyl alcohol: 1.11
<b>VOC content (g/L):</b> 787	<b>Odor threshold (ppm):</b> For Methyl alcohol: 100	<b>Partition coefficient (n-octanol/water):</b> No information available
<b>Viscosity:</b> No information available	<b>Miscibility:</b> Miscible with water Miscible with Ethanol Miscible with Ether Miscible with Benzene Miscible with Chloroform	<b>Solubility:</b> No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

For Methyl Alcohol:

Methanol has a violent reaction with alkyl aluminum salts, acetyl bromide, chloroform + sodium hydroxide, chromic anhydride, cyanuric chloride, lead perchlorate, perchloric acid, phosphorus trioxide, nitric acid

Methanol mixed with diethyl zinc reacts explosively and ignites

Reacts vigorously with oxidizing agents

Phosphorus trioxide and Methanol will react very violently

Acetyl bromide interaction with Methanol is violent and evolves hydrogen bromide

Ignition occurs when Methanol comes in contact with chromium trioxide

### Chemical stability

#### **Stability:**

Stable under recommended storage conditions

#### **Possibility of Hazardous Reactions:**

Hazardous polymerization does not occur

#### **Conditions to avoid:**

Heat. Ignition sources. Incompatible materials.

**Product code:** P-358

**Product name:** PAN, 0.1 PERCENT  
(W/V) INDICATOR SOLUTION IN  
METHANOL

7 / 16

**Incompatible Materials:** Oxidizing agents. Acids. Metals. Alkali Metals. Alkaline Earth metals. Aluminum. Zinc. Acid chlorides. Acid anhydrides. Chlorine. chromium trioxide . Potassium t-butoxide. Chromic anhydride. Beryllium hydride. Acetyl bromide. Phosphorous trioxide. Dichloromethane. Chloroform + Sodium methoxide.

**Hazardous decomposition products:** Carbon monoxide. Carbon dioxide.

**Other Information**  
**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Ingestion. Skin. Eyes. Inhalation.

### Acute Toxicity

#### Component Information

##### *Methyl Alcohol - 67-56-1*

**LD50/oral/rat** = 5628 mg/kg (EU Chemicals Bureau IUCLID dataset)  
5600 mg/kg (RTECS)  
6200 mg/kg (LOLI; EU Chemicals Bureau IUCLID dataset)  
**LD50/oral/mouse** = 5800 mg/kg  
**LD50/dermal/rat** = No information available  
**LD50/dermal/rabbit** = 15800 mg/kg  
**LC50/inhalation/rat** = 83.2 mg/L Inhalation LC50 Rat 4 h  
64000 ppm 4 h  
**LC50/inhalation/mouse** = 41000 ppm 6 h  
**Other LD50 or LC50 information** = 14200 mg/kg Oral LD50 Rabbit  
7500 mg/kg Oral LD50 Dog  
>5000 mg/kg Oral LD50 Pig  
7000 mg/kg Oral LD50 Monkey  
22500 ppm Inhalation LC50 Rat 8 hr.

##### *P.A.N - 85-85-8*

**LD50/oral/rat** = No information available  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rat** = No information available  
**LD50/dermal/rabbit** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50 information** = No information available

#### Product Information

**LD50/oral/rat** =  
**VALUE- Acute Tox Oral** = 5628mg/kg

**Product code:** P-358

**Product name:** PAN, 0.1 PERCENT  
(W/V) INDICATOR SOLUTION IN  
METHANOL

8 / 16



**LD50/oral/mouse =**  
**Value - Acute Tox Oral = 5800mg/kg**

**LD50/dermal/rabbit**  
**VALUE-Acute Tox Dermal = 15800mg/kg**

**LD50/dermal/rat**  
**VALUE -Acute Tox Dermal = No information available**

**LC50/inhalation/rat**  
**VALUE-Vapor = 83.2mg/l (4-hr)**  
**VALUE-Gas = 64000ppm (4-hr)**  
**VALUE-Dust/Mist = No information available**

**LC50/Inhalation/mouse**  
**VALUE-Vapor = No information available**  
**VALUE - Gas = 41000 ppm (6-hr)**  
**VALUE - Dust/Mist = No information available**

### Symptoms

**Skin Contact:** Mildly to moderately irritating to the skin. Methanol can be absorbed through the skin, producing systemic effects that include visual disturbances. Absorption through the skin may cause metabolic acidosis.

**Eye Contact:** Causes serious eye irritation. Moderately irritating to the eyes. Causes conjunctivitis. May cause reversible corneal opacity.

**Inhalation** May cause irritation of respiratory tract. Symptoms may include coughing and wheezing. May cause lacrimation. May cause nausea and headache. Inhalation of high concentrations of vapors may cause dizziness or suffocation. May cause metabolic acidosis. May cause central nervous system effects, central nervous system depression.

**Ingestion** Toxic if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause abdominal pain. May cause constipation. May cause headache. May affect respiration (difficult or labored breathing resulting in shortness of breath). May affect behavior/central nervous system/peripheral nervous system (general anesthetic/sedation, malaise, dizziness, vertigo, delirium, confusion, restlessness, giddiness, back pain, headache, muscle weakness, somnolence, lethargy, spastic paralysis, muscle contraction, tremor, ataxia, seizures/convulsions, unconsciousness, coma). May affect the cardiovascular system (tachycardia, bradycardia, hypotension, cardiac failure). May cause rapid eye movement. May cause pupillary dilation. May cause significant visual disturbances (reduced reactivity/and or increased sensitivity to light, blurred vision, double vision, snowy vision) and blindness. May cause metabolic acidosis. It may affect the pancreas (pancreatitis). May cause hyperglycemia. May affect liver . May affect urinary system (kidneys). It may affect the brain. May affect the blood (blood coagulation time - increased prothrombin and partial thromboplastin times). May affect blood (changes in serum composition, leukocytosis). May affect electrolytes. May cause hypophosphatemia. May cause hypokalemia. May cause hypomagnesemia. May affect the muscles and cause musculoskeletal effects (breakdown of muscle fibers (rhabdomyolysis), myalgia and joint pain).

**Aspiration hazard** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Chronic Toxicity**

Methanol is very slowly eliminated from the body. Because of this slow elimination, Methanol should be regarded as a cumulative poison. Though a single exposure may cause no effect, daily exposures may result in accumulation of harmful amounts. Prolonged or repeated exposure by inhalation or ingestion will have effects similar to those of acute inhalation or ingestion.

Prolonged or repeated inhalation may affect metabolism (weight loss)

Prolonged or repeated inhalation may affect the brain

Prolonged or repeated ingestion may affect the liver, and kidneys

Prolonged or repeated inhalation may affect the spleen

Prolonged or repeated inhalation may affect the adrenal gland

Prolonged or repeated skin contact may cause dermatitis and defatting, dryness, and cracking of the skin

**Sensitization:**

No information available

**Mutagenic Effects:**

For Methyl Alcohol:  
Mutations in microorganisms  
Experiments with bacteria and/or yeast have shown mutagenic effects

**Carcinogenic effects:**

Not considered carcinogenic.

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Methyl Alcohol	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
P.A.N	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity**

Suspected of damaging fertility or the unborn child

**Reproductive Effects:**

No information available

**Developmental Effects:**

For Methyl Alcohol:  
Possible risk of harm to the unborn child  
May cause adverse developmental effects

**Teratogenic Effects:**

For Methyl Alcohol:  
May cause birth defects (teratogenic effects)

**Specific Target Organ Toxicity****STOT - single exposure**

central nervous system. Eyes. Optic nerve.

**STOT - repeated exposure**

Causes damage to organs through prolonged or repeated exposure. liver. kidney. Eyes. central nervous system.

**Target Organs:**

Skin. Central nervous system. Nervous system. Optic nerve. Eyes/vision. Kidneys. Liver.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** Aquatic environment.

*Methyl Alcohol - 67-56-1*

**Freshwater Fish Species Data:** 13500 - 17600 mg/L LC50 *Lepomis macrochirus* 96 h flow-through 1  
18 - 20 mL/L LC50 *Oncorhynchus mykiss* 96 h static 1  
19500 - 20700 mg/L LC50 *Oncorhynchus mykiss* 96 h flow-through 1  
28200 mg/L LC50 *Pimephales promelas* 96 h flow-through 1  
100 mg/L LC50 *Pimephales promelas* 96 h static 1

**Persistence and degradability:** Methanol in water is rapidly biodegraded and volatilized. Aquatic hydrolysis, oxidation, photolysis, adsorption to sediment, and bioconcentration are not significant fate processes. The half-life of methanol in surfact water ranges from 24 hrs. to 168 hrs.

Based on its vapor pressure, methanol exists almost entirely in the vapor phase in the ambient atmosphere. It is degraded by reaction with photochemically produced hydroxyl radicals and has an estimated half-life of 17.8 days. Methanol is physically removed from air by rain due to its solubility. Methanol can react with NO<sub>2</sub> in polluted to form methyl nitrate.

The half-life of methanol in air ranges from 71 hrs. (3 days) to 713 hrs. (29.7 days) based on photooxidation half-life in air

**Bioaccumulative potential:** No information available

**Mobility:** No information available

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

**Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal. Do not re-use empty containers Dispose of as unused product.

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Methyl Alcohol	None	None	None	U154 Ignitable waste
P.A.N	None	None	None	None

## 14. TRANSPORT INFORMATION

**DOT**

**UN-No:** UN1230  
**Proper Shipping Name:** Methanol  
**Hazard Class:** 3  
**Subsidiary Risk:** 6.1  
**Packing Group:** II  
**ERG No:** 131  
**Marine Pollutant:** No data available  
**DOT RQ (lbs):** No information available

**Product code:** P-358

**Product name:** PAN, 0.1 PERCENT  
(W/V) INDICATOR SOLUTION IN  
METHANOL

11 / 16

## 14. TRANSPORT INFORMATION

Symbol(s): +, I, R5

### TDG (Canada)

UN-No: UN1230  
Proper Shipping Name: Methanol  
Hazard Class: 3  
Subsidiary Risk: (6.1)  
Packing Group: II  
Description: No information available

### ADR

UN-No: UN1230  
Proper Shipping Name: Methanol  
Hazard Class: 3  
Packing Group: II  
Subsidiary Risk: 6.1  
Classification Code: No information available  
Description: No information available  
CEFIC Tremcard No: No information available

### IMO / IMDG

UN-No: UN1230  
Proper Shipping Name: Methanol  
Hazard Class: 3  
Subsidiary Risk: 6.1  
Packing Group: II  
Description: No information available  
IMDG Page: No information available  
Marine Pollutant: No information available  
EMS: F-E  
MFAG: No information available  
Maximum Quantity: No information available

### RID

UN-No: UN1230  
Proper Shipping Name: Methanol  
Hazard Class: 3  
Subsidiary Risk: 6.1  
Packing Group: II  
Classification Code: No information available  
Description: No information available

### ICAO

UN-No: UN1230  
Proper Shipping Name: Methanol  
Hazard Class: 3  
Subsidiary Risk: 6.1  
Packing Group: II  
Description: No information available

### IATA

UN-No: UN1230  
Proper Shipping Name: Methanol  
Hazard Class: 3  
Subsidiary Risk: 6.1

Product code: P-358

Product name: PAN, 0.1 PERCENT  
(W/V) INDICATOR SOLUTION IN  
METHANOL

12 / 16

## 14. TRANSPORT INFORMATION

**Packing Group:** II  
**ERG Code:** 3L  
**Description:** No information available

## 15. REGULATORY INFORMATION

### International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Methyl Alcohol</i>	Present	Present KE-23193	Present	Present (2)-201	Present	Present	Present 200-659-6
<i>P.A.N</i>	Present	Not present	Not present	Not present	Present	Present	Present 201-637-9

### U.S. Regulations

#### *Methyl Alcohol*

**Massachusetts RTK:** Present  
**New Jersey RTK Hazardous Substance List:** 1222  
**New Jersey (EHS) List:** 1222 500 lb TPQ  
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present  
**Pennsylvania RTK:** Environmental hazard  
**Pennsylvania RTK - Environmental Hazard List:** Present  
**Minnesota - Hazardous Substance List:** Present  
**New York Release Reporting - List of Hazardous Substances:**  
 5000 lb RQ  
 1 lb RQ  
**Louisiana Reportable Quantity List for Pollutants:** 5000lbfinal RQ  
 2270kgfinal RQ  
**California Directors List of Hazardous Substances:** Present

**FDA - Direct Food Additives** 21 CFR 173.250  
 21 CFR 172.869

**FDA - 21 CFR - Total Food Additives** 172.560 172.859 172.867 173.250 173.385 175.105 175.300 176.180 176.200 176.210  
 177.1200 177.2420 177.2460 177.2800 73.345 73.615

### California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

#### Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

#### Chemicals Known to the State of California to Cause Reproductive Toxicity:

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
<i>Methyl Alcohol</i>	Not Listed	developmental	Not Listed	Not Listed
<i>P.A.N</i>	Not Listed	Not Listed	Not Listed	Not Listed

### CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
<i>Methyl Alcohol</i>	5000 lb final RQ 2270 kg final RQ	None	None	None	1.0 % de minimis concentration
<i>P.A.N</i>	None	None	None	None	None

### U.S. TSCA

**Product code:** P-358

**Product name:** PAN, 0.1 PERCENT  
 (W/V) INDICATOR SOLUTION IN  
 METHANOL

**13 / 16**

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Methyl Alcohol	Not Applicable	Not Applicable
P.A.N	Not Applicable	Not Applicable

## Canada

### WHMIS hazard class:

B2 Flammable liquid  
D1B Toxic materials  
D2A Very toxic materials  
D2B Toxic materials

### Methyl Alcohol

B2 D1B D2A D2B including 28%

### Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Methyl Alcohol	1 %

## Inventory

Components	Canada (DSL)	Canada (NDSL)
Methyl Alcohol	Present	Not Listed
P.A.N	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Methyl Alcohol	Not listed	Not listed
P.A.N	Not listed	Not listed

## EU Classification

### R-phrase(s)

R11 - Highly flammable.  
R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.  
R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

### S -phrase(s)

S 7 - Keep container tightly closed.  
S16 - Keep away from sources of ignition - No smoking.  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S 1/2 - Keep locked up and out of the reach of children.  
S36/37 - Wear suitable protective clothing and gloves.

Components	Classification	Concentration Limits:	Safety Phrases
------------	----------------	-----------------------	----------------

Methyl Alcohol	C>=20% F; R11 T; R23/24/25-39/23/24/25 C>=3%<20% Xn; R20/21/22 C>=3%<10% Xn; R68/20/21/22	20%<=C: T; R:23/24/25 3%<=C<20%: Xn; R:20/21/22 10%<=C: T; R:39/23/24/25 3%<=C<10%: Xn; R:68/20/21/22	S1/2 S7 S16 S36/37 S45
P.A.N		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

F - Highly flammable.

T - Toxic



**16. OTHER INFORMATION**

## 16. OTHER INFORMATION

**Preparation Date:** 8/26/2015  
**Revision Date:** 8/26/2015  
**Prepared by:** Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**