

# Performance Chemical Company

Product: Pro-Solve 406

Current Issue Date: June-01-2016

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## Pro-Solve 406

## GHS

## Safety Data Sheet

**From: Performance Chemical Company**

P. O. Box 69065  
Odessa, Texas 79769

Phone: 432-333-2370  
Fax: 432-337-4740

All non-emergency questions should be directed to 432-333-2370 for assistance.

24 Hour Emergency Telephone  
CHEM-TEL, INC. 1-800-255-3924

**NOTE:** CHEM-TEL emergency number to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

## 1. Product Identification

<b>Trade Name</b>	Pro-Solve 406 Paraffin Solvent / Dispersant
<b>CAS Number:</b>	Mixture – See Section 2
<b>Product Family:</b>	Complex Mixture. Contains Petroleum Distillates
<b>Synonyms:</b>	N/AP

## 2. Hazards Identification

**Hazards Classification:** Flammable Liquid-Category 2  
Acute Toxicity-Category 4  
TOST (Repeated)-Category 2  
Skin Irritant-Catgory 2  
Eye Irritant-Category 2a  
Aspiration Toxicity-Category 2  
Ecotoxicity-Category IV



**DANGER**

**Hazard Statement:**

EXTREMELY FLAMMABLE LIQUID – IRRITANT – ABSORBED THROUGH THE SKIN -  
CENTRAL NERVOUS SYSTEM -HARMFUL OR FATAL IF SWALLOWED -  
ASPIRATION HAZARD

**Precautionary Statement:**

Severe fire hazard. Vapor may cause flash fire or explosion! Keep away from heat, sparks, open flame, and other ignition sources.

If swallowed, DO NOT INDUCE VOMITING, as this may cause chemical pneumonia (fluid in the lungs). Contact with this product may cause eye, skin, and mucous membrane irritation. Harmful if absorbed through the skin. Avoid prolonged breathing of vapors or mists. Inhalation may cause irritation, anesthetic effects (dizziness, nausea, headache, intoxication) and respiratory system effects. Excessive exposure may affect the liver and kidneys. Prolonged and/or repeated inhalation may increase the heart's susceptibility to arrhythmias (irregular beats)!

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## 3. Composition / Information on Ingredients

Component Name	CAS Registry No.	Concentration % (Wt.)
Light Aliphatic Petroleum Distillates	64742-89-8	44.0 to 80.0
Heptanes	Mixture	50.0 to 60.0
MethylCycloHexane	108-87-2	18.0 to 24.0
Octanes	Mixture	12.0 to 17.0
Toluene	108-88-3	12.0 to 20.0

## 4. First Aid Measures:

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

<b>Inhalation</b>	Immediately move individual to fresh air. If individual is not breathing, immediately begin artificial respiration. If heart has stopped, immediately begin CardioPulmonary Resuscitation (CPR). If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately.
<b>Eye Contact</b>	Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately.
<b>Skin Contact</b>	Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.
<b>Ingestion</b>	DO NOT INDUCE VOMITING or give anything by mouth. If spontaneous vomiting is about to occur, place individual's head below his knees. If individual is drowsy or unconscious, place on his left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave individual unattended. Seek medical attention immediately.
<b>Notes to Physician</b>	<p>Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Vigorous anti-inflammatory / steroid treatment may be required at first evidence of upper airway or pulmonary edema. Administer 100 percent humidified supplemental oxygen with assisted ventilation as required.</p> <p>If ingested, this material presents a significant aspiration / chemical pneumonitis hazard. As a result, induction of emesis is not recommended. Administer an aqueous slurry of activated charcoal followed by a cathartic such as magnesium citrate or sorbitol. Also, treatment may involve careful gastric lavage if performed soon after ingestion or in patients who are comatose or at risk of convulsing. Protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position. Obtain chest X-ray and liver function tests. Monitor for cardiac function, respiratory distress and arterial blood gases in severe exposure cases.</p> <p><b>Epinephrine and other sympathomimetic drugs</b> may initiate cardiac arrhythmias (irregular beating) in persons exposed to high concentrations of this material (e.g., in enclosed spaces or with deliberate abuse). If used, monitor heart action closely. Consider use of other drugs with less arrhythmogenic potential.</p>

## 5. Fire Fighting Measures

<b>NFPA Flammability Classification</b>	OSHA / NFPA Class I B Flammable Liquid. Extremely Flammable!
<b>Flash Point Method</b>	CLOSED CUP: 20 ° F. (-6 ° C.). (Tagliabue [ASTM D-56])
<b>Flammable Limits</b>	Lower: App. 1.0%                      Upper: App. 7.0%
<b>Autoignition Temperature</b>	No Data
<b>Hazardous Combustion</b>	Burning or excessive heating may produce smoke, carbon monoxide, carbon dioxide, oxides of

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<b>Products</b>	nitrogen, and possibly other harmful gasses and/or vapors.
<b>Fire and Explosion Hazards</b>	<b>Extremely Flammable Liquid!</b> 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. May create vapor/air explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.
<b>Extinguishing Media</b>	Use dry chemicals, carbon dioxide (CO <sub>2</sub> ), foam, water fog, or inert gas (nitrogen). Water fog and spray are effective in cooling containers and adjacent structures by might cause frothing and/or may not achieve extinguishment. A water jet may be used to cool the vessel's external walls to prevent pressure build-up, Autoignition, or explosion. NEVER use a water jet directly on the fire because it may spread the fire to a larger area.
<b>Fire Fighting Instructions</b>	Product and/or burning liquid will float on water. NEVER use a water jet directly on the fire because it may spread the fire to a larger area. Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from venting safety devices or discoloration of vessels, tanks, or pipelines. Notify appropriate authorities if liquid(s) enter sewers / waterways.

## 6. Accidental Release Measures

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

<b>General</b>	EXTREMELY FLAMMABLE LIQUID! Release causes an immediate fire or explosion hazard. Stop the leak if it can be done without risk. Evacuate all non-essential personnel from immediate area and establish a "regulated zone" with site control and security. Do not touch or walk through spilled material. CAUTION: SLIPPERY. Released material will be slippery on smooth, hard surfaces, especially when wet. All equipment used when handling this material should be grounded. Absorb or cover with dry earth, sand, or other non-combustible material, and transfer to appropriate waste containers. Use clean, non-sparking tools to collect absorbed material.
<b>Small Spills</b>	Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to container for disposal.
<b>Large Spills</b>	Secure area and control access. Dike far ahead of a liquid spill to ensure complete collection. Water mist or spray may be used to reduce or disperse vapors; but, it may not prevent ignition in closed spaces. This material will float on water, and its run-off may create an explosion or fire hazard. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If run-off occurs, notify proper authorities that a spill has occurred. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

## 7. Handling and Storage

<b>Handling</b>	A spill or leak can cause an immediate fire / explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. <u>Bond and ground all equipment before transferring this material from one container to another.</u> Do not contact with oxidizable materials. Do not breathe vapor. Use only with adequate ventilation / personal protection. Never siphon by mouth or take internally. Avoid contact with eyes, skin and clothing.
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Prevent contact with food, chewing, or smoking materials.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons away from the area. Eliminate all potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide ventilation to maintain exposure potential below applicable exposure limits. Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Empty containers may contain material residues which can ignite with explosive force. Misuse of empty containers can be dangerous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues. Do not pressurize or expose empty containers to open flame, sparks, or heat. Keep container closed and drum bungs in place. All label warnings and precautions must be observed. Return empty drums to a qualified reconditioner. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling, or disposing of empty containers and/or waste residues of this material. Emergency eyewash fountains and safety showers should be available in the immediate vicinity of potential exposure.

## Storage

Store and transport in accordance with all applicable laws. Keep containers tightly closed and store in a cool, dry, well-ventilated place, plainly labeled, and out of closed vehicles. Keep away from all ignition sources! Ground all equipment containing this material. Containers should be able to withstand pressures expected from warming and cooling in storage. This product should be stored in a cool, well-ventilated area. All electrical equipment in areas where this material is stored or handled should be installed in accordance with applicable requirements of the NFPA's National Electrical Code (NEC).

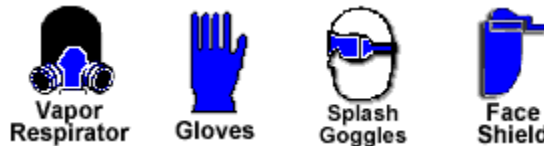
## 8. Exposure Controls and Personal Protection

### Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and/or mists below the pertinent exposure limits (see below). All electrical equipment should comply with the NFPA NEC Standards. Ensure that an emergency eye wash station and safety shower are near the work-station location.

### Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional Personal Protective Equipment may be required.



### Eye Protection

Safety glasses with side shields are recommended as a minimum protection. During transfer operations or when there is a likelihood of misting, splashing, or spraying, chemical goggles and face shield should be worn. Suitable eye wash equipment should be readily available.

### Hand Protection

Avoid skin contact and use gloves (disposable PVC, neoprene, Nitrile, vinyl, or PVC/NBR). Before eating, drinking, smoking, use of toilet facilities, or leaving work, wash hands with plenty of mild soap and water. DO NOT use gasoline, kerosene, other solvents, or harsh abrasive skin cleaners.

### Body Protection

Avoid skin contact. It is recommended that fire-retardant garments (e.g. Nomex™) be worn while working with flammable and combustible liquids. If splashing or spraying is expected, chemical-resistant protective clothing (Tyvek®, Nitrile, or neoprene) should be worn. This might include long sleeves, apron, slicker suit, boots, and additional facial protection. If general contact occurs, IMMEDIATELY remove soaked clothing and take a shower. Contaminated leather goods should be removed promptly and discarded.

### Respiratory Protection

For unknown vapor concentrations use a positive-pressure, pressure-demand, self-contained breathing apparatus (SCBA). For known vapor concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirator use should follow OSHA requirements (29 CFR 1910.134) or equivalent standard (e.g. ANSI Z88.2).

### General Comments

Warning! Odor is an inadequate warning for hazardous conditions.

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## Occupational Exposure Guidelines

### Substance

Light Aliphatic Petroleum Distillates (64742-89-8)  
Heptane (n-Heptane)

MethylCycloHexane (108-87-2)

Octane (all Isomers)

Toluene (108-88-3)

### Applicable Workplace Exposure Levels

No exposure limits established.

OSHA VPEL 400 ppm. – TWA  
OSHA VPEL 500 ppm. – STEL  
ACGIH TLV 400 ppm. – TWA  
ACGIH TLV 500 ppm. – STEL

OSHA VPEL 400 ppm. – TWA (Skin)  
ACGIH TLV 400 ppm. – TWA

OSHA VPEL 300 ppm. – TWA  
OSHA VPEL 375 ppm. – STEL  
ACGIH TLV 300 ppm. – TWA

OSHA VPEL 100 ppm. – TWA  
OSHA VPEL 150 ppm. – STEL  
ACGIH TLV 50 ppm. – TWA (Skin)

## 9. Physical and Chemical Properties

Physical State	Liquid	Color	Transparent, Light amber.
Odor	Hydrocarbon	pH	Not Applicable
Specific Gravity	0.7889 gm./ml.	Liquid Density	6.556 Lbs. / Gallon
Vapor Pressure	39.5 mm Hg @ 68 ° F.	Vapor Density	~3.7 (Air = 1)
Boiling Point / Range	194 ° F to 258 ° F.	Freezing Point	< 0° F.
Evaporation Rate	Slower than Ethyl Ether	Solubility in Water	Dispersible at 70° F.

## 10. Stability and Reactivity

Chemical Stability	Stable
Hazardous Polymerization	Not expected to occur.
Conditions to Avoid	Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.
Materials Incompatibility	Strong acids, alkalis, and oxidizers such as liquid chlorine, other halogens, hydrogen peroxide, and oxygen. <b>n-Heptane</b> will dissolve some plastics.
Hazardous Decomposition Products	May form carbon monoxide, carbon dioxide, and other oxides of carbon and nitrogen.

## 11. Toxicological Information

**Carcinogenic Potential:** This product does not contain any intentional components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC, or NTP.

### Toxicity Data

#### Light Aliphatic Petroleum Distillates (64742-89-8)

GAS (LC50): [Rat] Acute: 61000 ppm for 4 hours – Changes In motor activity and convulsions.

#### n-Heptane (142-82-5)

GAS (LC50): [Rat] Acute: 103,000 mg/m# for 4 hours. - Convulsions  
DERMAL (LD50): [Rabbit] Acute: GT 2,000 mg/kg  
INTRAVENOUS (LD50): [Mouse] Acute: 222 mg/kg.

#### MethylCycloHexane (108-87-2)

ORAL (LD50): [Mouse] Acute: 2,250 mg/kg.  
GAS (LC50): [Mouse] Acute: 41,500 mg/m# for 2 hours – Hypermotility and diarrhea.  
GAS (LD50): [Rabbit] Acute: 15,227 ppm for 1 hour – General anesthetic,

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convulsions, and changes in the salivary glands.

## Toluene (108-88-3)

ORAL (LD50): [Rat]	Acute: 646 mg/kg
ORAL (LD50): [Cat]	Acute: 4,000 mg/kg
GAS (LC50): [Rat]	Acute: 49,000 mg/m <sup>3</sup> for 4 hours
GAS (LC50): [Mouse]	Acute: 5,320 ppm for 8 hours
GAS (LC50): [Mouse]	Acute: 400 ppm for 24 hours
DERMAL (LC50): [Rabbit]	Acute: 14,100 uL/kg or 12,125 mg/kg
INTRAVENOUS (LD50): [Rat]	Acute: 1,960 mg/kg
INTRAVENOUS (LD50): [ Mouse]	Acute: 2,000 mg/kg
SUBCUTANEOUS (LD50): [Mouse]	Acute: 2,250 mg/kg
INTRAPERITONEAL (LD50): [Mouse]	Acute: 59 mg/kg
INTRAPERITONEAL (LD50): [Guinea Pig]	Acute: 500 mg/kg
INTRAPERITONEAL (LD50): [Rat]	Acute: 1,332 mg/kg

## Iso-Octane (2,2,4-TriMethylPentane)

GAS (LC50): [Mouse] Acute: 16,000 ppm for 15 minutes - Respiratory arrest.

## 12. Ecological Information

### Ecotoxicity

Ecological effects testing has not been conducted on this material. If spilled, this material, its storage tank water bottoms and sludge, and any contaminated soil or water may be hazardous to human, animal, and aquatic life. The petroleum distillates content of this product is volatile and might contribute to the creation of atmospheric smog. n-Heptane, heptane isomers, and iso-octane all have estimated half-lives of between 2.4 and 4.4 days in air when photochemical hydroxyl and/or nitrate radicals are present. Toluene has a half-life of from 3 hours to slightly over 1 day and cyclohexane has a half-life of from 6 hours to over 4 days when hydroxyl radicals are present.

### Environmental Fate

This material is potentially toxic to freshwater and saltwater ecosystems. It will normally float on water with its lighter components evaporating rapidly. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result, this covering layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway might be enough to cause a fish kill or create an anaerobic environment. This coating action can also be harmful or fatal to plankton, algae, aquatic life, and water birds.

For additional ecological information concerning components of this product, users should refer to the Hazardous Substances Data Bank R and the Oil and Hazardous Materials / Technical Assistance Data System (OHM/TADS) maintained by the U.S. National Library of Medicine. (See Section 2 for components.)

## 13. Disposal Considerations

### Waste Management Information

Dispose of in accordance with all applicable local, state, and federal regulations. Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitability (D001) and/or its toxic (D018) characteristics. In addition, conditions of use may cause this material to become a hazardous waste, as defined by Federal or State regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR Parts 260 through 271). State and/or local regulations might be even more restrictive. Contact the RCRA/Superfund Hotline at (800) 424-9436 or your regional US EPA office for guidance concerning case specific disposal issues.

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## 14. Transport Information

### DOT Information - 49 CFR 172.101

**Proper Shipping Name** PETROLEUM DISTILLATES, N.O.S., MIXTURE, FLAMMABLE LIQUID, UN 1268, II  
**Hazard Class** Class 3: Flammable Liquid  
**Packing Group** II  
**UN / NA ID** UN 1268  
**NOS Component** Naphtha Solvent, Toluene  
**RQ (Reportable Quantity) – 49 CFR 172.101**

Component	Reportable Quantity (Lbs.)
Toluene	1,000

**ERG No.** 128  
**Placards Required**



## 15. Regulatory Information

**TSCA Inventory** The intentional ingredients of this product are listed.

**CERCLA RQ - 40 CFR 302.4(a)**

Component	RQ (Lbs.)	Concentration %Wt.
Toluene	1,000	12.0 to 20.0
Iso-Octane (2,2,4 TriMethylPentane)	1,000	< 3.0
Benzene	10	0.001 to 0.002
Cyclohexane	1,000	0 to 3.0

**SARA 302 Components – 40 CFR 355 Appendix A** None identified

**SARA 311/312 - 40 CFR 370.2** Fire Hazard, Acute (Immediate) Health Hazard, and Chronic (delayed) Health Hazard.

**SARA 313 Components - 40 CFR 372.65**

Section 313 Component(s)	CAS Number	%Wt.
Toluene	108-88-3	12.0 to 20.0
Cyclohexane	110-82-7	0 to 3.0

**OSHA Process Safety Management – 29 CFR 1910.119** None Listed

**EPA Accidental Release Prevention – 40 CFR 68.130** None Listed

**California Proposition 65**

Section 313 Component(s)	CAS Number	%Wt.
Toluene	108-88-3	12.0 to 20.0
Benzene	71-43-2	0.001 to 0.002

**New Jersey RTK Label Information** See section 2

**Pennsylvania RTK Label Information** See section 2

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## 16. Other Information

### Disclaimer of Liability:

The information in this msds was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. This msds was prepared and is to be used only for this product.

The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use or disposal of the product.

Abbreviations:

App. = Approximately    EQ = Equal    > = Greater Than    < = Less Than    N/AP = Not Applicable    ND = No Data  
NE = Not Established

ACGIH = American Conference of Governmental Industrial Hygienists

AIHA = American Industrial Hygiene Association

IARC = International Agency for Research on Cancer

NTP = National Toxicology Program

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

NPCA = National Paint and Coating Manufacturers Association

HMIS = Hazardous Materials Information System

NFPA = National Fire Protection Association

EPA = Environmental Protection Agency

### Explanation of the HMIS® Ratings

#### HMIS® III - HEALTH HAZARD RATINGS

\* **Chronic Hazard** Chronic (long-term) health effects may result from repeated overexposure

**0 Minimal Hazard** No significant risk to health

**1 Slight Hazard** Irritation or minor reversible injury possible

**2 Moderate Hazard** Temporary or minor injury may occur

**3 Serious Hazard** Major injury likely unless prompt action is taken and medical treatment is given

**4 Severe Hazard** Life-threatening, major or permanent damage may result from single or repeated overexposures

#### HMIS® III - FLAMMABILITY RATINGS

**0 Minimal Hazard** Materials that will not burn

**1 Slight Hazard** Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

**2 Moderate Hazard** Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)

**3 Serious Hazard** Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

**4 Severe Hazard** Flammable gases, or very volatile flammable liquids with flash points below 73 F, and boiling points below 100 F. Materials may ignite spontaneously with air. (Class IA)

#### HMIS® III - PHYSICAL HAZARD RATINGS

**0 Minimal Hazard** Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

**1 Slight Hazard** Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

**2 Moderate Hazard** Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

**3 Serious Hazard** Materials that may form explosive mixtures with water and are capable of detonation or explosive reaction in the presence of a strong initiating source. Materials may polymerize, decompose, self-react, or undergo other chemical change at normal temperature and pressure with moderate risk of explosion.

**4 Severe Hazard** Materials that are readily capable of explosive water reaction, detonation or explosive decomposition, polymerization, or self-reaction at normal temperature and pressure.