COMPANY IDENTITY: SolvChem, Inc. CALUMET 420-460 PRODUCT IDENTITY:

SDS NUMBER: CA200

SAFETY DATA SHEET

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements of the Global Harmonizing System.

THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD) IMPORTANT: Read this SDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: CALUMET 420-460
PRODUCT SYNONYMS: None
PRODUCT USES: Petrochemical industry, Solvent

COMPANY IDENTITY: COMPANY ADDRESS: COMPANY CITY: COMPANY PHONE:

COMPANY IDENTITY: SolvChem, Inc.
COMPANY ADDRESS: 1904 Mykawa Road
COMPANY CITY: Pearland, TX 77581-3210
COMPANY PHONE: 1-281-485-5377
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

DANGER!!

2.1 HAZARD STATEMENTS: (CAT = Hazard Category)
(H200s) PHYSICAL: Flammable Liquids(CAT:2)
H227 COMBUSTIBLE LIQUID.

(H300s) HEALTH: Aspiration Hazard(CAT:1)
H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.

2.2 PRECAUTIONARY STATEMENTS:

2 PRECAUTIONARY STATEMENTS:
EXPOSURE PREVENTION: STRICT HYGIENE!

AVOID EXPOSURE OF (PREGNANT) WOMEN!

P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or physician.
Do NOT induce vomiting.
P403+235 Store in a well-ventilated place. Keep cool.

P405

Store locked up. P501

Dispose of contents/container according to:

local/regional/national/international regulations.

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 COMPOSITION

EINECS# WT % MATERIAL CAS# Hydrotreated Light Distillates 64742-47-8 100

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1).

3.2 TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).



SDS DATE: 03/30/2017

ORIGINAL: 03/30/2017

COMPANY IDENTITY: SolvChem, Inc. CALUMET 420-460 PRODUCT IDENTITY:

SDS NUMBER: CA200 ORIGINAL: 03/30/2017

SDS DATE: 03/30/2017

SECTION 4. FIRST AID MEASURES

4.1 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE & CHRONIC: See Section 11 for symptoms/effects, acute & chronic.

4.2 GENERAL ADVICE:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

4.3 EYE CONTACT:
If this product enters the eyes, check for and remove any contact lenses. Open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose under gently running water. The sufficient force to open eyelids attention. more surface. Minimum flushing is for 15 minutes. Seek immédiate medical attention.

4.4 SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

4.5 INHALATION:

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention.

4.6 SWALLOWING:

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

4.7 RESCUERS:

In event of emergency, assess the danger before taking action. Do not put yourself at risk of injury. Use personal protective equipment as required. Victims of chemical exposure must be taken for medical attention. If necessary, rescuers should be taken for medical attention. Take a copy of label and SDS to physician or health professional with victim.

4.8 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

SECTION 5. FIRE FIGHTING MEASURES

- 5.1 FIRE & EXPLOSION PREVENTIVE MEASURES:
 - NO open flames, NO sparks, & NO smoking. Use a closed system, ventilation, explosion-proof electrical equipment, lighting.
 Do NOT use compressed air for filling, discharging, or handling.
- 5.2 SUITABLE (& UNSUITABLE) EXTINGUISHING MEDIA: Use dry powder, AFFF, foam, carbon dioxide.
- 5.3 SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS FOR FIRE FIGHTERS: Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.

 Do not enter confined fire-space without full bunker gear.

 (Helmet with face shield, bunker coats, gloves & rubber boots).
- 5.4 SPECIFIC HAZARDS OF CHEMICAL & HAZARDOUS COMBUSTION PRODUCTS: FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE Isolate from oxidizers, heat, sparks, electric equipment & open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Empty container very hazardous! Continue all label precautions!

SDS DATE: 03/30/2017

ORIGINAL: 03/30/2017

COMPANY IDENTITY: SolvChem, Inc.
PRODUCT IDENTITY: CALUMET 420-460

SDS NUMBER: CA200

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. No action shall be taken involving personal risk without suitable training. Keep unnecessary and unprotected personnel from entering spill area. Do not touch or walk through material. Avoid breathing vapor or mist. Provide adequate ventilation. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel. ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area).

6.2 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, EMERGENCY PROCEDURES:
The proper personal protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves, they should be Level B: triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard-hat, and Self-Contained Breathing Apparatus specific for the material handled, goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat, and Self-Contained Breathing Apparatus or respirator.

Personal protective equipment are required wherever engineering controls are not adequate or conditions for potential exposure exist. Select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

- 6.3 ENVIRONMENTAL PRECAUTIONS:
 - Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.
- 6.4 METHODS AND MATERIAL FOR CONTAINMENT & CLEAN-UP:
 Absorb spilled liquid with poly pads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization.

For small liquid spills (< 1 drum), transfer by mechanical means such as vacuum truck to a labeled, sealable container for product recovery or safe disposal.

For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste.

For all liquid spills: Allow residues to evaporate or soak up with non-combustible absorbent (such as: sand, soil, and so on) material and dispose of safely. Clean up all spill residue with shovels and put in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

6.5 NOTIFICATION PROCEDURES:

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting release of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

COMPANY IDENTITY: SolvChem, Inc. SDS DATE: 03/30/2017 PRODUCT IDENTITY: CALUMET 420-460 ORIGINAL: 03/30/2017

SDS NUMBER: CA200

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:
Electrostatic charge may accumulate and create a hazardous condition when pumping and handling this material. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CR 1910.106, "Flammable and Combustible Liquids", National Fire Protection Association (NFPA 77, "Recommended Practice on Static Electricity", and/or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents". Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1 m/sec until fill pipe submerged to twice its diameter. then <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging or handling operations. Avoid free fall of liquid. Ground containers when transferring. Empty container very hazardous! Do not flame cut, saw, drill, braze, or weld. Continue all label precautions!

- 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:
 Keep in fireproof surroundings. Keep separated from strong oxidants. Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage.
- 7.3 NONBULK: CONTAINERS:
 Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers should be handled with care. Never store food, feed, or drinking water in containers which held this product.
- 7.4 BULK CONTAINERS:
 All tanks and pipelines which contain this material must be labeled. Perform routine
 maintenance on tanks or pipelines which contain this product. Report all leaks immediately
 to the proper personnel.
- 7.5 TANK CAR SHIPMENTS:
 Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendation and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment.). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be level, brakes must be set or wheels must be locked or blocked prior to loading or unloading. Tank car (for loading) or storage tanks (for unloading) must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified (if required) prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car or vessel.
- 7.6 PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Collect all rinsates and dispose of according to applicable Federal, State, Provincial, or local procedures.
- 7.7 EMPTY CONTAINER WARNING:
 Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.

SDS DATE: 03/30/2017 COMPANY IDENTITY: SolvChem, Inc. CALUMET 420-460 PRODUCT IDENTITY: ORIGINAL: 03/30/2017

SDS NUMBER: CA200

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 EXPOSURE LIMITS:

CAS# **EINECS#** TWA (OSHA) TLV (ACGIH) MATERIAL Hydrotreated Light Distillates 64742-47-8 200 mg/m3 200 mg/m3

In addition, using manufacturers' data, based on EPA Method 311, the following EPA Hazardous Air Pollutants may be present in trace amounts (less than 0.1%): Benzene, Mixed Xylenes, Ethylbenzene

8.2 APPROPRIATE ENGINEERING CONTROLS:

RESPIRATORY EXPOSURE CONTROLS

Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations, after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown. Maintain airborne contaminant concentrations below exposure limits. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For particulates, a particulate respirator (NIOSH Type N95 or better filters) may be worn. If oil particles (such as: lubricants, cutting fluids, glycerine, and so on) are present, use a NIOSH Type R or P filter. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown. levels are below 19.5% or are unknown.

EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face Self-Contained Breathing Apparatus with an auxiliary positive pressure Self-Contained Breathing Apparatus.

VENTILATION

LOCAL EXHAUST: Necessary MECHANICAL (GENERAL): Necessary SPECIAL: OTHER: None None Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, chemical splash goggles should be worn, when a higher degree of protection is necessary, use splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

HAND PROTECTION:

HAND PROTECTION:

Use gloves chemically resistant to this material. Glove must be inspected prior to use.

Preferred examples: Butyl rubber, Chlorinated Polyethylene, Polyethylene, Ethyl vinyl alcohol laminate ("EVAL"), Polyvinyl alcohol ("PVA"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber ("nitrile") or ("NBR"), Polyvinyl chloride ("PVC") or "vinyl"), Viton. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good practices. Wash and dry hands. applicable laws and good practices. Wash and dry hands.

BODY PROTECTION:

Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

COMPANY IDENTITY: SolvChem, Inc. SDS DATE: 03/30/2017 PRODUCT IDENTITY: CALUMET 420-460 ORIGINAL: 03/30/2017

SDS NUMBER: CA200

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored or used. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash hands, forearms and face promptly and thoroughly after handling chemical products, before eating, smoking and using toilet facilities and at the end of the working period. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

```
Liquid, Water-White
Mild, Hydrocarbon
APPEARANCE:
ODOR:
ODOR THRESHOLD:
                                                                                                        Not Ávailable
pH (Neutrality):
MELTING POINT/FREEZING POINT:
                                                                                                        Not Available
                                                                                                        Not Available
                                                                                                        223 to 245 C / 433 to 473 F
95 C / 203 F (PMCC)
BOILING RANGE (IBP ,Dry Point):
FLASH POINT (TEST METHOD):
EVAPORATION RATE (n-Butyl Acetate=1):
FLAMMABILITY CLASSIFICATION:
                                                                                                        0.19
LANDWABILITY CLASSIFICATION:
LOWER FLAMMABLE LIMIT IN AIR (% by vol):
UPPER FLAMMABLE LIMIT IN AIR (% by vol):
VAPOR PRESSURE (mm of Hg)@20 C
VAPOR DENSITY (air=1):
GRAVITY @ 68/68 F / 20/20 C:
DENSITY:
                                                                                                        Class I B
                                                                                                        0.6
                                                                                                        5.5
0.2
                                                                                                        4.5
                                                                                                        0.803
                                                                                                       0.804
       SPECIFIC GRAVITY (Water=1):
       POUNDS/GALLON:
                                                                                                        6.70
                                                                                                        Negligible
Not Available
WATER SOLUBILITY:
PARTITION COEFFICIENT (n-Octane/Water):
                                                                                                        > 220 C / > 428 F
AUTO IGNITION TEMPERATURE:
AUTO IGNITION TEMPERATURE:

DECOMPOSITION TEMPERATURE:

NO
TOTAL VOC'S (TVOC)*:

NONEXEMPT VOC'S (CVOC)*:

HAZARDOUS AIR POLLUTANTS (HAPS):

NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C) 0.

VISCOSITY @ 40 C (ASTM D445):

* Using CARB (California Air Resources Board Rules).
                                                                                                        Not Available
                                                                                                        100.0 Vol% / 804.0 g/L / 6.7 Lbs/Gal
100.0 Vol% / 804.0 g/L / 6.7 Lbs/Gal
5.1 Wt% / 43.2 g/L / .3 Lbs/Gal
                                                                                                        0.0
                                                                                                        2 cSt
```

SECTION 10. STABILITY & REACTIVITY

10.1 REACTIVITY & CHEMICAL STABILITY:

Stable under normal conditions, no hazardous reactions when kept from incompatibles.

10.2 POSSIBILITY OF HAZARDOUS REACTIONS & CONDITIONS TO AVOID: Isolate from oxidizers, heat, sparks, electric equipment & open flame.

10.3 INCOMPATIBLE MATERIALS:

Reacts violently with strong oxidants, causing fire & explosion hazard. Attacks many plastics, rubber, coatings.

10.4 HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide, Carbon Dioxide from burning.

10.5 HAZARDOUS POLYMERIZATION:

Will not occur.

COMPANY IDENTITY: SolvChem, Inc. SDS DATE: 03/30/2017 CALUMET 420-460 PRODUCT IDENTITY: ORIGINAL: 03/30/2017

SDS NUMBER: CA200

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 ACUTE HAZARDS

11.1.1 SKIN CONTACT:

Primary irritation to skin, defatting, dermatitis. Absorption thru skin increases exposure.

Wash thoroughly after handling.

11.1.2 EYE CONTACT:

Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation.

11.1.3 INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful.
Acute overexposure can cause harm to affected organs through routes of entry. Use of alcoholic beverages enhances the harmful effect.

11.1.4 SWALLOWING:

Harmful or fatal if swallowed.

Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea. The symptoms of chemical pneumonitis may not show up for a few days.

11.2 SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing disorders of any target organs mentioned in this Document can be aggravated by over-exposure through routes of entry to components of this product. Persons with these disorders should avoid use of this product.

11.3 CHRONIC HAZARDS

- 11.3.1 CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

n-Hexane may cause peripheral neuropathy.
Pregnant women should avoid use. May cause birth defects.
Leukemia been reported in humans from Benzene.
This product contains less than 111 ppm of Benzene.

Not considered hazardous in such low concentrations. Absorption thru skin may be harmful.

Depending on degree of exposure, periodic medical examination is indicated.

- 11.3.2 TARGET ORGANS: May cause damage to target organs, based on animal data.
- 11.3.3 IRRITANCY: Irritating to contaminated tissue.
- 11.3.4 SENSITIZATION: No component is known as a sensitizer.
- 11.3.5 MUTAGENICITY: No known reports of mutagenic effects in humans.
- 11.3.6 EMBRYOTOXICITY: No known reports of embryotoxic effects in humans.
- 11.3.7 TERATOGENICITY: No known reports of teratogenic effects in humans.
- 11.3.8 REPRODUCTIVE TOXICITY: No known reports of reproductive effects in humans A MUTAGEN is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate across generational lines. An EMBRYOTOXIN is a chemical which causes damage to a developing embryo (such as: within the first 8 weeks of pregnancy in humans), but the damage does not propagate across generational lines. A TERATOGEN is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A REPRODUCTIVE TOXIN is any substance which interferes in any way with the reproductive process.

11.4 MAMMALIAN TOXICITY INFORMATION

LD50 (Oral): LD50 (Skin): > 5000 mg/kg (Rat) > 2000 mg/kg (Rabbit)

SDS DATE: 03/30/2017

ORIGINAL: 03/30/2017

COMPANY IDENTITY: SolvChem, Inc. CALUMET 420-460 PRODUCT IDENTITY:

SDS NUMBER: CA200

SECTION 12. ECOLOGICAL INFORMATION

12.1 ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.2 EFFECT OF MATERIAL ON PLANTS AND ANIMALS:
This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

12.3 EFFECT OF MATERIAL ON AQUATIC LIFE: Chronic NOEL: 0.48 mg/L (21 days) (Daphnia) The substance is toxic to aquatic organisms.

12.4 MOBILITY IN SOIL This material is a mobile liquid.

12.5 DEGRADABILITY This product is nonbiodegradable.

12.6 ACCUMULATION This product does not accumulate or biomagnify in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

THE GENERATION OF WASTE SHOULD BE AVOIDED OR MINIMIZED WHEREVER POSSIBLE. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken When handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards. Original labels must not be removed, and lids must be closed. The person collecting the container(s) must be provided with an SDS. Processing. use or contamination may change the waste disposal requirements. Do not Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal.
ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES. EPA CHARACTERISTIC: D001

SECTION 14. TRANSPORT INFORMATION

DOT/TDG SHIP NAME: Not Regulated

DRUM LABEL: None

IATA / ICAO: Not Regulated IMO / IMDG: Not Regulated
EMERGENCY RESPONSE GUIDEBOOK NUMBER: None

SECTION 15. REGULATORY INFORMATION

15.1 EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health, Fire

All components of this product are on the TSCA list. SARA Title III Section 313 Supplier Notification This product contains the indicated <*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material. COMPANY IDENTITY: SolvChem, Inc. PRODUCT IDENTITY: CALUMET 420-460

SDS NUMBER: CA200

SDS DATE: 03/30/2017 ORIGINAL: 03/30/2017

SECTION 15. REGULATORY INFORMATION (CONTINUED)

Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

15.2 STATE REGULATIONS:

THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN CALIFORNIA AOMD RULE 443.1 & SIMILAR REGULATIONS

CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain chemicals known to the State of California to cause reproductive toxicity or cancer.

15.3 INTERNATIONAL REGULATIONS

The identified components of this product are listed on the chemical inventories of the following countries:
Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

15.4 CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) D2B: Irritating to skin / eyes.

This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This Document contains all information required by the CPR.

SECTION 16. OTHER INFORMATION

16.1 HAZARD RATINGS:

HEALTH (NFPA): 1, HEALTH (HMIS): 1, FLAMMABILITY: 1, PHYSICAL HAZARD: 0 (Personal Protection Rating to be supplied by user based on use conditions.) This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

16.2 EMPLOYEE TRAINING

See Section 2 (Hazards Identification). Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

16.3 SDS DATE: 03/30/2017

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.

Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Unless updated, the Safety Data Sheet is valid until 03/30/2020.