KOR-CHEM

SAFETY DATA SHEET

NOTICE: Judgment may be based on indirect test and technical literature. The OSHA Hazard Communication Standard only requires SDS's and special labeling for materials defined as "HAZARDOUS"; see 29 CFR 1910.1200 (c). This document may be about a product which is NOT hazardous but is provided as information for our customers. See references for information.

SECTION 1. IDENTIFICATION

Product Identifier: PC-235
Product Use: Press & Screen Wash
Manufactured by: Kor-Chem, Inc.
5800 Bucknell Drive
Atlanta, GA 30336

Product Identification # (PIF): 01642
Emergency Telephone #: 1-800-255-3924
General Information #: 404-344-9580
Date Prepared: November 11, 2013
Date Revised: April 15, 2016

SECTION 2. HAZARD(S) IDENTIFICATION

GHS Hazard Codification:

Signal Word: DANGER

Hazard Statement	Category	Code	Hazard Class
Flammable liquid and vapor	3	H226	Flammable Liquid
Harmful if swallowed	4	H302	Acute Oral Toxicity
May be fatal is swallowed and enters airways	1	H304	Aspiration Hazard
Causes skin irritation	2	H315	Skin Irritation
May cause an allergic skin reaction	1	H317	Skin Sensitization
Causes serious eye irritation	2A	H319	Eye Irritation
May cause respiratory irritation	3	H335	STOT, SE; Respiratory Tract Irritation
May cause drowsiness or dizziness	3	H336	STOT, Single Exposure; Narcotic effects
May damage fertility or the unborn child	1B	H360	Reproductive toxicity
May cause damage to organs through prolonged/repeated exposure	2	H373	STOT, Repeated Exposure
Toxic to aquatic life with long-lasting effects	2	H411	Hazardous to the Aquatic Environment, Long-term

Precautionary Measures:

Category	Code	Statement
Prevention	P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe fumes/mists/ vapors/sprays.
	P264	Wash thoroughly after handling.
	P270	Do not eat, drink or smoke or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P330	Rinse mouth.
	P331	Do NOT induce vomiting.
	P303+P361+P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
	P352	Wash with soap and water.
	P321	Specific treatments: See Section 4 First Aid Measures.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
	P363	Wash contaminated clothing before reuse.
	P362	Take off contaminated clothing and wash before reuse.
	P370+P378	In case of fire: Use foam, dry chemical, carbon dioxide fire extinguishers or water spray for extinction.
	P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do so. Continue rinsing.
	P337+P313	If eye irritation persists: Get medical advice/attention.
	P391	Collect spillage.
Storage	P403+P233+P235	Store in a well ventilated place. Keep container tightly closed. Keep cool.
	P405	Store locked up.
Disposal	P501	Dispose of contents/container in compliance with all Federal, State/Provincial and local laws and regulations.

Description of any hazards not otherwise classified: Repeated or prolonged skin contact may cause dermatitis (skin drying). May be absorbed through the skin and produce toxic effects such as central nervous system depression.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Common Name	CAS #	Concentration Range %
Naphtha (petroleum), heavy alkylate	OMS	64741-65-7	47 – 51
1-Methoxy-2-propanol	Propylene glycol monomethyl ether	107-98-2	16 – 20
2-butyoxyethanol	Ethylene glycol monobutyl ether	111-76-2	16 – 20
D-Limonene	Orange Terpenes	5989-27-5	8 – 12
n-Methyl Pyrrolidone	NMP	872-50-4	4 – 8

SECTION 4. FIRST AID MEASURES

Eyes: Flush well with water for at least 15 minutes, holding eyelids open. Remove any contact lenses and continue rinsing. Seek medical attention if irritation persists.
Skin: Remove immediately all contaminated clothing and launder before reuse. Rinse skin with water/shower. Wash with soap and water. If irritation persists or rash develops, seek medical attention. Contaminated work clothing should not be allowed out of the workplace.
Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing – Call a POISON CENTER or doctor/physician if you feel unwell. If breathing is difficult, have a trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration by way of pocket mask equipped with one-way valve or other proper respiratory device – Do NOT use mouth-to-mouth method if victim inhaled material. Call a physician.
Ingestion: Immediately call a POISON CENTER or doctor/physician. DO NOT INDUCE VOMITING. Rinse mouth. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Other: May damage fertility or the unborn child. If exposed or concerned, get medical attention/advice.

SECTION 5. FIRE-FIGHTING MEASURES

Flammability: Class IC Flammable Liquid
Flash Point: 89^{o}F (32^{o}C)
Extinguishing Media: Foam, dry chemical, carbon dioxide fire extinguishers. Do not spray water directly on fire. Use water spray to cool containers.
Specific hazards arising from chemical: Vapors are heavier than air and may travel along the ground to an ignition source. Readily ignited by static discharge. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products: Oxides of carbon and nitrogen.
Firefighting protective equipment: Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.
Sensitivity to static discharge: This product is flammable and readily ignited even by static discharge. Grounding equipment is recommended.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required (Section 8). Keep away from heat/sparks/open flames/hot surfaces – No smoking. Ventilate area. Do not breathe fumes/mists/ vapors/sprays. Avoid release to the environment – Collect spillage. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
For Small Spills: Spilled material may be slippery. Avoid dispersal of material and runoff into soil, waterways, drains and sewers. Vapor-suppressing foam may be used to reduce vapors. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste with non-sparking tools. Wash walking surfaces with water to reduce slipping hazard. Dispose of contaminated absorbent material in accordance with local, state and federal regulations.
For Large Spills: Large spills cannot occur due to packaging.

SECTION 7. HANDLING AND STORAGE

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required (Section 8). Use only outdoors or in a well-ventilated area. Do not breathe fumes/mists/vapors/sprays. Keep away from heat/sparks/open flames/hot surfaces – No smoking. Use proper bonding and grounding during product transfer as described in document NFPA 77. Use explosion-proof equipment and non-sparking tools. Take precautionary measures against static discharge. Vapors are heavier than air and may travel along the ground to an ignition source. Never use welding or cutting torch on or near drum (even empty) because product can ignite explosively. Do not premix with other chemicals. Avoid release to the environment – Collect spillage. Do not eat, drink or smoke in work areas. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Storage: Keep away from heat, flame, or sunlight – keep cool. Keep from freezing. Keep container tightly closed when not in use. Store locked up. Store in a well-ventilated place. Protect from physical damage. Store away from strong oxidizing agents, acids, alkalis, chlorates, chlorine, organic amines, aluminum, zinc, tin, copper and their alloys.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	CAS #	OSHA/PEL	ACGIH/TLV	STEL
Naphtha (petroleum), heavy alkylate	64741-65-7	500 ppm	Not established	Not established
1-Methoxy-2-propanol	107-98-2	Not determined	100ppm	150ppm
2-butyoxyethanol	111-76-2	50ppm	20ppm	Not established
D-Limonene	5989-27-5	Not determined	Not determined	Not determined
n-Methyl Pyrrolidone	872-50-4	Not established	Not established	Not established

Engineering Controls: Provide adequate ventilation. Observe occupational exposure limits and keep the risk of exposure to a minimum.

Personal protective equipment as required:

Eye: Safety glasses with side shields or splash proof goggles. Face shield.
Skin: Chemical resistant (impervious) gloves. Normal materials handling clothing and apron. Boots.
Respirator: Use NIOSH approved protection with vapor cartridge if PEL is exceeded or if vapors are causing irritation.
Other: Use only in a well ventilated area. Do not eat, drink or smoke while handling. Wash thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless, clear liquid	Upper/Lower flammability limits	Not determined
Odor	Cherry	Vapor pressure	>0.1mmHg @ 20^{o}C
Odor threshold	Not determined	Vapor density (Air = 1)	>1
pH	Not applicable	Specific gravity (water = 1.0)	0.820 g/ml
Melting point	Not determined	Solubility	Insoluble in water
Freezing point	Not determined	Partition coefficient (n-octanol/water)	Not determined
Boiling point	Not determined	Auto-ignition temperature	Not determined
Flash point	89^{o}F (32^{o}C)	Decomposition temperature	Not determined
Evaporation rate (n-butyl acetate=1)	<1	Viscosity	Not determined
Flammability	Class IC flammable	Product VOC	100%

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions.
Chemical stability: Stable under normal, ambient temperature and conditions.
Possibility of hazardous reactions: Vapors may form explosive mixture with air. Hazardous polymerization will not occur.
Conditions to avoid: Heat, flame and sparks. Keep from freezing. Do not mix with other chemicals
Incompatible materials: Avoid strong oxidizing agents, acids, alkalis, chlorates, chlorine, organic amines, aluminum, zinc, tin, copper and their alloys.
Hazardous combustion products: Carbon monoxide and carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity:

Oral (LD50 Rat): >2000 mg/kg
Dermal (LD50 Rabbit): Not determined
Inhalation (LC50 Rat): >2000 mg/kg

Skin corrosion/irritation: Skin irritant. Symptoms may include reddening and itching. Prolonged contact may cause skin defatting (dermatitis).
Serious eye damage/irritation: Serious eye irritant. Symtpoms may include a burning sensation, tearing, swelling and redness. Symptoms may persist for several days.
Respiratory or skin sensitization: May cause an allergic skin reaction with rash.
Germ cell mutagenicity: No data available
Carcinocenicity: NTP/IARC/OSHA Carcinogen: Naphtha (petroleum), heavy alkylate – IARC Group 2B: Possibly carcinogenic to human. IARC Group 3 – Orange Terpenes CAS# 5989-27-5
Reproductive toxicity: May damage fertility or the unborn child. In a California Dept. of Health study, NMP caused delayed growth in the offspring of animals exposed during pregnancy. NMP also reduced fertility in male rats and increased the time for female rats to become pregnant.
STOT-single exposure: May cause respiratory irritation. May cause drowsiness or dizziness. Symptoms may include coughing and difficulty breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
STOT-repeated exposure: May cause damage to organs through prolonged/repeated exposure - 1-Methoxy-2-propanol overexposure may cause harm to kidneys, blood, nerves, liver and lungs.
Aspiration hazard: May be fatal is swallowed and enters airways.
Ingestion: harmful if swallowed – ingestion may cause weakness, confusion, anxiety, decreased blood pressure, CNS depressions with collapse and coma.
Likely routes of exposure: Eyes, skin and inhalation
Interactive effects: May damage fertility or the unborn child – pregnant women or women trying to become pregnant should avoid use.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

96h LC-50 (fish): >10 mg/L
96h EC-50 (invertebrates): Not determined
48h LC-50 (algae): Not determined

Persistence and degradability: Not determined
Bioaccumulative potential: Not determined
Mobility in soil: Soil mobility not determined. This product floats on water. This product is volatile and may spread in the atmosphere.
Other adverse effects: Toxic to aquatic life with long-lasting effects: Avoid release to the environment – Collect spillage.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Do not dump into sewers, on the ground or into any waterways. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Toxic to aquatic life with long-lasting effects: Avoid release to the environment – Collect spillage.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied. Do not cut, drill, grind or weld on or near the container.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable) (40 CFR 261.22).
Other: This product contains one or more substances that are listed with the State of California as a hazardous waste.

SECTION 14. TRANSPORT INFORMATION

United States DOT

UN/ID No.: UN1993
Proper Shipping Name: Flammable Liquids, n.o.s., (1-Methoxy-2-Propanol, Naphtha (petroleum), heavy alkylate, Terpene Hydrocarbon)
Hazard Class: 3
Packing Group: III
49 CFR §173.154 (b) (2) (Exemption): This product can ship as "Limited Quantity" in inner packaging not over 1.3 gallons. (Non Hazardous)

IATA and IMDG

UN/ID No.: UN1993
Proper Shipping Name: Flammable Liquids, n.o.s., (1-Methoxy-2-Propanol, Naphtha (petroleum), heavy alkylate, Terpene Hydrocarbon)
Hazard Class: 3
Packing Group: III
Marine Pollutant (IMDG Code): Not listed (49 CFR 172.101).
Toxic to aquatic life with long-lasting effects.
Transportation in bulk (IMDG - Annex II of MARPOL 73/78 and IBC Code): Not offered in bulk for transport overseas.

SECTION 15. REGULATORY INFORMATION

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements under 40 CFR 720.30.
SARA Section 302: The components of this product are either not regulated or regulated, but present in negligible concentrations.
SARA TITLE III Section 311/312:

Immediate (Acute) Health	Yes	Fire Hazard	Yes
Delayed (Chronic) Health	Yes	Reactive Hazard	No

SARA Title 313: Ethylene Glycol Monobutyl Ether CAS# 111-76-2, percent by weight = 18%. N-Methyl Pyrrolidone Ether CAS# 872-50-4, percent by weight = 5.5%.
CERCLA: This product does not have a reportable quantity.
United States Right-To-Know: (Naphtha (petroleum), heavy alkylate) CAS #64741-65-7 – Massachusetts, Pennsylvania and New Jersey. 1-Methoxy-2-propanol CAS# 107-98-2 – Massachusetts, New Jersey, Pennsylvania. Ethylene Glycol Monobutyl Ether CAS# 111-76-2 - California, Massachusetts, Minnesota, New Jersey & Pennsylvania. N-Methyl Pyrrolidone CAS# 872-50-4 - Massachusetts and Pennsylvania.
Proposition 65: This product contains the following chemicals known to the State of California to cause cancer, birth defects or other reproductive harm: N-Methyl Pyrrolidone CAS#872-50-4.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable) (40 CFR 261.22).

SECTION 16. OTHER INFORMATION

Date Prepared: April 15, 2016 – SDS updated to meet version #5 GHS requirements.
Hazard Ratings (HMIS): Health 2, Flammability 2, Reactivity 0 (Scale 0 – 4). Personal Protection Rating to be supplied by user based on use conditions.
Carefully read all instructions on label before handling this product.
Keep out of reach of children.
"FOR INDUSTRIAL USE ONLY"

Abbreviation	Full Name/Explanation
ACGIH	American Conference of Government Industrial Hygienists
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CNS	Central Nervous System
CFR	Code of Federal Regulations
DOT	Department of Transportation
EC	Effective Concentration
GHS	Globally Harmonized System
HMIS	Hazardous Material Information System
LC	Lethal Concentration
LD	Lethal Dose
NA	Not Applicable
ND	Not Determined
NE	Not Established
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation Recovery Act
SARA	Superfund Amendments and Reauthorization Act

STEL	Short-Term Exposure Limit
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
VOC	Volatile Organic Compounds

The information contained herein is based on data available to us and is believed to be correct. We make no warranty, however, expressed or implied regarding the accuracy of these data or the results obtained from the use thereof.
Regulatory Standards: DOT TITLE 49, Code of Federal Regulations 172.101: Parts 100 to 177, Revised 10/1/92.
SUPER FUND AMENDMENTS REAUTHORIZATION ACT OF 1986, TITLE III TOXIC SUBSTANCE CONTROL ACT LIST (TSCA)- INGREDIENTS LISTED. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES NATIONAL TOXICOLOGICAL PROGRAM (NTP) REPORT OF CARCINOGENS INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPHS, OCCUPATIONAL SAFETY & HEALTH REGULATIONS. CODE OF FED. REGS. FOOD & DRUG, 21 PARTS 170 to 199, Revised 4/1/91, 173.310.