

HEARTLAND MANUFACTURING
105 BROOK COURT
BOLLING BROOK IL60440

MSDS NO. 61012
PRODUCT HRTLND F.SYS.CLNR.12 OZ.12/CS.
REVISION
REV.DATE 01/20/95
DATE 01/26/95

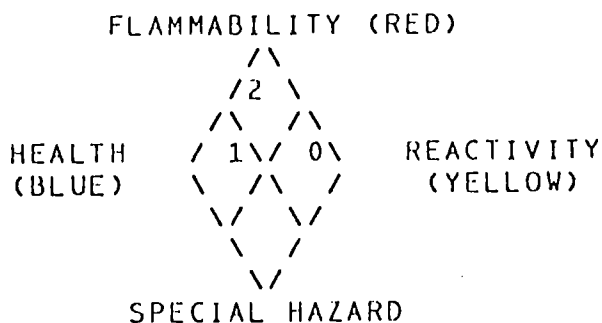
01. PRODUCT IDENTIFICATION

CHEMICAL NAME: PETROLEUM HYDROCARBONS
SYNONYM(S)/COMMON NAME(S):
FUEL SYSTEM CLEANER

CHEM FORMULA: PROPRIETARY
CAS NUMBER: NA MIXTURE

DOT SHIP NAME: FLAMMABLE LIQUIDS N.O.S.
DOT HAZ CLASS: 3.3
DOT ID NUMBER: UN1993

EMERGENCY TELEPHONE NUMBER
CHEMTREC 1-800-CMA-8200



IMCO SHIP NAME: FLAMMABLE LIQUIDS N.O.S. (NAPHTHA, PETROLEUM)
IMCO HAZARD CLASS: 3.3
IMCO I.D. #: 1993
IMCO PAGE NUMBER: 3345

02. HAZARDOUS INGREDIENTS

INGREDIENT	OSHA PEL / ACGIH TLV	CAS NUMBER	PERCENT
MINERAL SPIRITS	NA / 350MG/M3	8052-41-3	60.00-70.00
HEAVY AROMATIC NAPHTHA SEVERELY HYDROTREATED	5MG/CU METER / NA	64742-94-5	<10.00
NAPHTHENIC DISTALLATE	NA / NA	64742-52-5	<25.00
NAPHTHALENE	50 / 52	91-20-3	< 5.00

3. PHYSICAL CHARACTERISTICS

PH
NO DATA

VISCOSITY

NO DATA

BOILING POINT: 325-384 DEG F
SPECIFIC GRAVITY (H2O = 1): 0.790
VAPOR PRESSURE (MM HG): 7 @ 100 DEG F
MELTING POINT: NA
VAPOR DENSITY (AIR = 1): 4.8
SOLUBILITY IN WATER: INSOLUBLE
EVAPORATION RATE (BUTYL ACETATE = 1): < 0.1
APPEARANCE & ODOR: DARK LIQUID WITH PETROLEUM ODOR.

4. FIRE AND EXPLOSION DATA

AUTOIGNITION TEMPERATURE
NOT DETERMINED.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS

MAY LIBERATE CARBON MONOXIDE, CARBON DIOXIDE, AND UNIDENTIFIED ORGANIC COMPOUNDS IN BLACK SMOKE. MATERIALS TO AVOID INCLUDE OXIDIZING AGENTS.

"EMPTY" CONTAINER WARNING

DISPOSE OF CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SPILLS OR LEAKS IN A MANNER APPROVED FOR THIS MATERIAL. CONSULT APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES.

NOTE: EMPTY CONTAINERS HAVE RESIDUES, GASES AND MISTS AND ARE SUBJECT TO PROPER WASTE DISPOSAL, AS ABOVE.

EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES

USE WATER FOG, DRY CHEMICAL, FOAM OR CO2. DO NOT USE A DIRECT WATER STREAM.

FLASH POINT (MINIMUM)

101 DEG. F.

FLAMMABLE OR EXPLOSIVE LIMITS (APRX. % BY VOLUME IN AIR)

LOWER: 1
UPPER: 6

5. REACTIVITY DATA

REACTIVITY

STABILITY: STABLE.

5. REACTIVITY DATA

(CONTINUED)

POLYMERIZATION: WILL NOT OCCUR.
MATERIALS TO AVOID: OXIDIZING AGENTS.
HAZARDOUS DECOMPOSITION PRODUCTS: MAY LIBERATE CARBON MONOXIDE,
CARBON DIOXIDE, AND UNIDENTIFIED ORGANIC COMPOUNDS IN BLACK SMOKE.

6. HEALTH HAZARD DATA

EFFECT OF OVEREXPOSURE (SIGNS AND SYMPTOMS OF EXPOSURE)

INHALATION OF HIGHER CONCENTRATIONS MAY CAUSE HEADACHES, NAUSEA,
AND VOMITING. INHALATION OF VERY HIGH CONCENTRATIONS OR PROLONGED
EXPOSURE MAY CAUSE UNCONSCIOUSNESS.

EYE CONTACT

IMMEDIATELY FLUSH EYES WITH LOTS OF RUNNING WATER FOR 15 MINUTES,
LIFTING THE UPPER AND LOWER EYELIDS OCCASIONALLY. GET IMMEDIATE
MEDICAL ATTENTION.

INGESTION

DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION. IF
VOMITING OCCURS SPONTANEOUSLY, KEEP VICTIM'S HEAD LOW BELOW HIS HIPS
TO PREVENT HIS BREATHING THE VOMITUS INTO HIS LUNGS.

INHALATION

REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING.
GET IMMEDIATE MEDICAL ATTENTION.

NATURE OF HAZARD

INHALATION: VAPORS AND MISTS IRRITATE MUCOUS MEMBRANES.
EYE CONTACT: LIQUID AND MIST MAY IRRITATE THE EYES.
SKIN CONTACT: BRIEF CONTACT MAY DRY THE SKIN. PROLONGED OR
REPEATED CONTACT MAY IRRITATE THE SKIN, CAUSING
DERMATITIS.
SWALLOWED: SWALLOWING THE LIQUID MAY RESULT IN VOMITING. IF
VOMITING OCCURS SPONTANEOUSLY, DO NOT ALLOW VOMITUS
TO BE BREATHED INTO THE LUNGS AS EVAN A SMALL
QUANTITY IN THE LUNGS MAY RESULT IN CHEMICAL
PNEUMONITIS AND PULMONARY EDEMA/HEMORRAGE.

SKIN CONTACT

IMMEDIATELY WASH SKIN WITH LOTS OF SOAP AND WATER. REMOVE
CONTAMINATED CLOTHING AND SHOES, WASH BEFORE REUSE. GET MEDICAL
ATTENTION IF IRRITATION PERSISTS AFTER WASHING.

VARIABILITY AMONG INDIVIDUALS

NONE KNOWN.

7. PRECAUTIONS FOR SAFE HANDLING AND USE

PRECAUTIONS FOR HANDLING

7. PRECAUTIONS FOR SAFE HANDLING AND USE

(CONTINUED)

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

STORE IN TIGHTLY CLOSED CONTAINERS IN COOL, DRY, ISOLATED AND WELL VENTILATED AREA AWAY FROM, HEAT SOURCES OF IGNITION AND INCOMPATIBLE MATERIALS. USE NONSPARKING TOOLS AND EXPLOSION PROOF EQUIPMENT. GROUND LINES, CONTAINERS, AND OTHER EQUIPMENT USED DURING PRODUCT TRANSFER TO REDUCE THE POSSIBILITY OF A STATIC INDUCED SPARK. DO NOT "SWITCH" LOAD (LOAD INTO CONTAINERS WHICH PREVIOUSLY CONTAINED GASOLINE OR OTHER LOW FLASH MATERIAL) BECAUSE OF POSSIBLE ACCUMULATION OF A STATIC CHARGE RESULTING IN A SOURCE OF IGNITION. USE GOOD PERSONAL HYGIENE PRACTICES. AFTER HANDLING THIS PRODUCT, WASH HANDS BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

8. INDUSTRIAL HYGIENE CONTROL MEASURES

INDUSTRIAL HYGIENE CONTROL MEASURES
SEE SEC 06, 07, 09.

9. SPECIAL PRECAUTIONS

EYE PROTECTION

CHEMICAL GOGGLES.

OTHER PROTECTIVE EQUIPMENT

LONG-SLEEVED SHIRT, TROUSERS, SAFETY SHOES, AND RUBBER APRON.

NOTE: AN EYEWASH AND SAFETY SHOWER SHOULD BE NEARBY AND READY FOR USE.

PERSONAL HYGIENE

DO NOT BREATHE VAPORS. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WEAR PROTECTIVE CLOTHING INCLUDING GOGGLES AND RUBBER GLOVES. WASH PROMPTLY WHEN SKIN IS WET, DURING BREAKS, AND BEFORE MEALS.

PROTECTIVE GLOVES

RUBBER GLOVES.

RESPIRATORY PROTECTION

NIOSH APPROVED CANNISTER RESPIRATOR IN THE ABSENCE OF ADEQUATE ENVIRONMENTAL CONTROLS AT THE POINT OF USE. FIRE FIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS. USE WATER SPRAY TO COOL NEARBY CONTAINERS AND STRUCTURES EXPOSED TO FIRE.

SPILL OR LEAK PROCEDURES

ACTION TO TAKE FOR SPILL OR LEAKS: WEAR PROTECTIVE EQUIPMENT INCLUDING RUBBER BOOTS, RUBBER GLOVES, RUBBER APRON, CHEMICAL GOGGLES, AND RESPIRATORY PROTECTION. EXTINGUISH ALL IGNITION SOURCES AND ENSURE THAT ALL HANDLING EQUIPMENT IS ELECTRICALLY GROUNDED. FOR SMALL SPILLS OR DRIPS, MOP OR WIPE UP AND DISPOSE OF IN DOT APPROVED WASTE CONTAINERS. FOR LARGE SPILLS, CONTAIN BY DIKING WITH SOIL OR OTHER ABSORBENT MATERIAL AND PLACE THE RESIDUE

9. SPECIAL PRECAUTIONS

(CONTINUED)

IN DOT APPROVED WASTE CONTAINERS. KEEP OUT OF SEWERS, STORM DRAINS, SURFACE WATERS, AND SOIL. COMPLY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS ON SPILL REPORTING, AND HANDLING AND DISPOSAL OF WASTE.

VENTILATION

LOCAL MECHANICAL EXHAUST VENTILATION CAPABLE OF MAINTAINING EMISSIONS AT THE POINT OF USE BELOW THE PEL. (OSHA PEL = 500 PPM).

WORK PRACTICES / ENGINEERING CONTROLS

KEEP AWAY FROM HEAT, SPARKS AND FLAMES. STORE IN A COOL, DRY PLACE. VENT CONTAINER FREQUENTLY AND MORE OFTEN IN WARM WEATHER, TO RELIEVE PRESSURE. ELECTRICALLY GROUND ALL EQUIPMENT WHEN HANDLING THIS PRODUCT AND USE ONLY NON-SPARKING TOOLS. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. DO NOT USE PRESSURE TO EMPTY CONTAINER. WASH THOROUGHLY AFTER HANDLING. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. DO NOT CUT, WELD, DRILL ON OR NEAR THIS CONTAINER. CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN PRODUCT RESIDUE AND VAPORS. ALWAYS OBEY HAZARD WARNINGS AND HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL.

10. DISCLAIMER

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