

CAST OFF®

Version 2.0

02/27/2003

1. PRODUCT AND COMPANY INFORMATION

| | | |
|----------------------------|---|---|
| Company | : | ChemRex® 889 Valley Park Drive SHAKOPEE, MN 55379 |
| Telephone | : | 952-496-6000 |
| Emergency telephone number | : | (800) 424-9300 (703) 527-3887 (Outside Continental US) |
| Product name | : | CAST OFF® |
| MSDS ID No. | : | 11000 |
| TSCA Inventory | : | All components of this product are included, or are exempt from inclusion, in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory. |
| Canadian DSL | : | All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List (DSL). |

2. HAZARDOUS INGREDIENTS

| <u>Chemical</u> | <u>CAS No.</u> | <u>TLV</u> | <u>STEL</u> | <u>PEL</u> | <u>CEIL</u> | <u>Weight %</u> |
|--|----------------|------------|-------------|------------|-------------|-----------------|
| PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC | 64742-52-5 | N.E. | N.E. | 500 ppm | N.E. | 15.00 - 40.00 % |
| FUEL OIL #2 | 68476-30-2 | N.E. | N.E. | N.E. | N.E. | 30.00 - 60.00 % |
| PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC | 64742-53-6 | N.E. | N.E. | 500 ppm | N.E. | 15.00 - 40.00 % |

3. HAZARDS IDENTIFICATION

| | | | | |
|--------------|--------|--------------|--------------------|-----|
| HMIS® Rating | HEALTH | FLAMMABILITY | PHYSICAL HAZARD | PPE |
| | 1 | 2 | 0 | F |

WHMIS Class : B3
D2B

Effects of Overexposure

| | | |
|------------------|---|---|
| Inhalation | : | Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Inhalation of high vapor concentrations can cause CNS-depression and narcosis. Prolonged inhalation can be harmful. |
| Skin | : | Prolonged skin contact may defat the skin and produce dermatitis. Prolonged or repeated exposure can cause skin irritation and redness. |
| Eyes | : | Can cause slight irritation. |
| Ingestion | : | Can cause slight irritation. |
| Chronic exposure | : | This product contains solvents. Reports associate repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Reports also indicate that solvents cause liver damage, kidney damage, and mucous membrane |

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irritation. Be warned that intentional misuse by deliberately inhaling the vapors and/or the product contents (a process often called "sniffing") can be harmful or fatal.

Carcinogenicity

| | ACGIH | IARC | NTP | OSHA |
|--|-------|---------------|------|------|
| PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC | N.E. | N.E. | N.E. | N.E. |
| FUEL OIL #2 | N.E. | Limited data. | N.E. | N.E. |
| PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC | N.E. | N.E. | N.E. | N.E. |

4. FIRST AID MEASURES

- Eye contact : Flush eyes with water, lifting upper and lower lids occasionally for 15 minutes. Seek medical attention.
- Skin contact : Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists seek medical attention. Wash contaminated clothing before reuse.
- Ingestion : Do not induce vomiting without medical advice. If conscious, drink plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician. If a person vomits, place him/her in the recovery position. Never give anything by mouth to an unconscious person.
- Inhalation : Remove victim from exposure. If difficulty with breathing, administer oxygen. If breathing has stopped administer artificial respiration, preferably mouth-to-mouth. Seek immediate medical attention.

5. FIRE-FIGHTING MEASURES

- Flash point : 60 °C (140 °F)
- Autoignition temperature : no data available
- Lower explosion limit : 0.7 %(V)
- Upper explosion limit : 5.0 %(V)
- Suitable extinguishing media : water fog
dry chemical
foam
carbon dioxide (CO2)
- Fire and Explosion Hazards : Combustible Liquid. Can form explosive mixtures at temperatures at or above the flashpoint. Vapors can travel to a source of ignition and flash back. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; CONTAINERS MAY EXPLODE AND CAUSE INJURY OR DEATH. Cool closed containers exposed to fire with water spray. Solid stream of water or foam can cause frothing.
- Protective equipment : As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

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Methods for cleaning up : Ventilate the area and remove all sources of ignition. Evacuate unnecessary personnel. Large spills should be handled carefully. Put on respiratory protection and necessary personal protective equipment. Dike or impound spilled Liquid. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Handling : Use only in area provided with appropriate ventilation. Keep out of reach of children. Take precautionary measures against static discharges. Ground and bound containers when transferring material. For personal protection see section 8.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection : Wear as appropriate:
safety glasses with side-shields
goggles
face-shield

Hand protection : Wear Chemically resistant gloves.

Body Protection : Wear as appropriate:
Chemically resistant clothes
preventive skin protection

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygienic Practices : Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

Engineering Controls : Local exhaust ventilation can be necessary to control any air contaminants to within their TLVs during the use of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color : light yellow

Physical State : liquid

Odor : kerosene

pH (at 100 %) : not applicable

Vapor Pressure : < 66.66 hPa

Vapor Density : Heavier than air

Boiling point/range : 162.78 °C (325.00 °F)

Freeze Point : no data available

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Water solubility : insoluble
 Specific Gravity : 0.88
 Viscosity : no data available
 Evaporation rate : Slower than Butyl acetate
 Partition coefficient (n-octanol/water) : no data available
 VOC Concentration as applied (less water and exempt solvents) : 350 g/l

10. STABILITY AND REACTIVITY

Stability : Stable under recommended storage conditions.
 Conditions to avoid : Heat, flames and sparks. Prolonged exposure to high temperatures
 Materials to avoid : Strong mineral acids, Lewis acids, oxidizing agents, strong bases.
 Hazardous decomposition products : Oxides of carbon
 Hazardous polymerization : Will not occur under normal conditions.

11. TOXICOLOGICAL INFORMATION

Acute inhalation toxicity

| <u>Product</u> | <u>Type</u> | <u>Value</u> | <u>Species</u> | <u>Exposure time</u> |
|--|-------------|-------------------|----------------|----------------------|
| | LC50 | no data available | | |
| <u>Component</u> | | | | |
| PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC | LC50 | no data available | | |
| FUEL OIL #2 | LC50 | no data available | | |
| PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC | LC50 | no data available | | |

Acute oral toxicity

| <u>Product</u> | <u>Type</u> | <u>Value</u> | <u>Species</u> |
|--|-------------|-------------------|----------------|
| | LD50 (Oral) | no data available | |
| <u>Component</u> | | | |
| PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC | LD50 (Oral) | 770 mg/kg | |
| FUEL OIL #2 | LD50 (Oral) | 6,480 mg/kg | |
| PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC | LD50 (Oral) | 790 mg/kg | |

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Acute dermal toxicity

| | <u>Type</u> | <u>Value</u> | <u>Species</u> |
|--|---------------|-------------------|----------------|
| <u>Product</u> | LD50 (Dermal) | no data available | |
| <u>Component</u> | | | |
| PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC | LD50 (Dermal) | no data available | |
| FUEL OIL #2 | LD50 (Dermal) | no data available | |
| PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC | LD50 (Dermal) | no data available | |

12. ECOLOGICAL INFORMATION

Ecotoxicological Information : There is no data available for this product.

13. DISPOSAL CONSIDERATIONS

Recommendations: Use excess product in an alternate beneficial application. Handle disposal of waste material in manner which complies with local, state, province and federal regulation.

14. TRANSPORT INFORMATION

| | | |
|------|------------------------|---|
| DOT | : Proper shipping name | Not regulated |
| IATA | : Proper shipping name | FLAMMABLE LIQUIDS, N.O.S. (Petroleum Distillates) |
| | UN-No | 1993 |
| | Class | 3 |
| | Packaging group | III |
| | Primary Label | Flammable liquid |

15. REGULATORY INFORMATION

SARA 311/312 (RTK)

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE (ACUTE) HEALTH HAZARD FIRE HAZARD DELAYED (CHRONIC) HEALTH HAZARD

SARA 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

| <u>Weight %</u> | <u>CAS No.</u> | <u>Chemical Name</u> |
|-----------------|----------------|----------------------|
|-----------------|----------------|----------------------|

No SARA 313 Chemicals exist in this product.

CERCLA

CERCLA section 103(a) specifically requires the person in charge of a vessel or facility to report immediately to the National Response Center (NRC) a release of a hazardous substance whose amount equals or exceeds the assigned RQ. The following hazardous substances are contained in this product.

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| | | |
|-----------|----------------|----------------------|
| <u>RQ</u> | <u>CAS No.</u> | <u>Chemical Name</u> |
|-----------|----------------|----------------------|

No CERCLA chemicals exists in this product above reportable concentrations.

TSCA Section 12(b) Export Notification

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

| | |
|----------------|----------------------|
| <u>CAS No.</u> | <u>Chemical Name</u> |
|----------------|----------------------|

There are no TSCA 12(b) Chemicals in this product.

California Proposition 65

The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer, birth defects or other reproductive harm:

| | |
|----------------|----------------------|
| <u>CAS No.</u> | <u>Chemical Name</u> |
|----------------|----------------------|

There are no Proposition 65 chemicals known to exist in this product.

16. OTHER INFORMATION

Legend : N.E. - Not Established
 : TLV - Threshold Limit Value
 : STEL - Short Term Exposure Limit
 : PEL - Permissible Exposure Limit
 : CEIL - Ceiling

Prepared By : Environment, Health and Safety Department

This information is furnished without warranty, representation, or license of any kind, except that this information is accurate to the best of the manufacturer's knowledge, or is obtained from sources believed by the manufacturer to be accurate and is not intended to be all inclusive. No warranty is expressed or implied regarding the accuracy of this information or the results to be obtained from its use thereof. The manufacturer assumes no responsibility for injuries proximately caused by use of the Material if reasonable safety procedures are not followed as stipulated in this Data Sheet. Additionally, the manufacturer assumes no responsibility for injuries proximately caused by abnormal use of the Material even if reasonable safety procedures are followed. Buyer assumes the risk in its use of the Material.

End of MSDS.