

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME: MAK COLD NECK GREASE

PRODUCT TYPE : LUBRICATING GREASE

PRODUCT SUPPLIER: BHARAT PETROLEUM CORPORATION LTD.,

4 & 6, CURRIMBHOY ROAD, BALLARD ESTATE,

 $Mumbai-400\ 001.\ MahArastra.$

INDIA.

2. PRODUCT/INGREDIENT

CHEMICAL COMPOSITION:

HIGHLY REFINED BASE OIL : 64-71 % WT.
 GRAPHITE : 10-12%WT
 ADDITIVES : 19-24 % WT.

The chemical identity of some or all the ingredients is confidential business information and is being withheld. In the event of a medical emergency, compositional information will be provided to medical staff.

4. HEALTH INFORMATION

EYE CONTACT: MAY BE MILDLY IRRITATING TO THE EYES

SKIN CONTACT: PROLONGED OR REPEATED CONTACT MAY

CAUSE VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE. RELEASE DURING HIGH PRESSURE USAGE MAY RESULT IN INJECTION OF OIL INTO THE

SKIN CAUSING LOCAL NECROSIS.

INHALATION:NO SPECIFIC INFORMATION IDENTIFIEDINGESTION:NO SPECIFIC INFORMATION IDENTIFIED

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SIGNS AND SYMPTOMS : IRRITATION AS NOTED ABOVE . LOCAL

NECROSIS IS EVIDENT BY DELAYED ONSET OF PAIN AND TISSUE DAMAGE A FEW HOURS FOLLOWING INJECTION.

OTHER HEALTH EFFECTS: THIS PRODUCT AND ITS COMPONENTS ARE

NOT CLASSIFIED AS CARCINOGENS BY INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC), NATIONAL TOXOCOLOGY PROGRAM (NTP) OR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). THIS SPECIFIC PRODUCT HAS NOT BEEN TESTED IN LONG-TERM CHRONIC EXPOSURE TESTS. LUBRICATING GREASES ARE GENERALLY CONSIDERED TO BE OF A LOW ORDER OF ACUTE TOXICITY TO HUMANS AND EXPERIMENTAL ANIMALS. HOWEVER, THE PROCEDURES HANDLING AND SAFETY PRECAUTIONS IN THIS MSDS SHOULD BE FOLLOWED TO MINIMISE EMPLOYE'S EXPOSURE.

5. EMERGENCY AND FIRST AID MEASURES

EYE CONTACT: FLUSH WITH COPIOUS AMOUNT OF WATER

FOR 15 MINUTES WHILE HOLDING EYELIDS

OPEN. GET MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING AND

WIPE EXCESS OFF. WASH WITH SOAP AND WATER OR A WATERLESS HAND CLEANEER FOLLOWED BY SOAP AND WATER. DO NOT REUSE CLOTHING UNTIL THOROUGHLY CLEANED. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. IF MATERIAL IS INJECTED UNDER THE SKIN, GET MEDICAL ATTENTION PROMPTLY TO PREVENT SERIOUS DAMAGE. DO NOT WAIT FOR SYMPTOMS TO

DEVELOP.

INHALATION : INHALATION OF FUMES MAY CAUSE THROAT

& NOSE IRRITATION. REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL

ATTENTION.

INGESTION : DO NOT INDUCE VOMITTING. IN GENERAL, NO

TREATMENT IS NECESSARY UNLESS LARGE QUANTITIES OF PRODUCT ARE INGESTED. HOWEVER GET MEDICAL ATTENTION.

6. FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD : 212 °C PMCC (BASE OIL)

FLAMMABLE LIMITS / % VOLUME IN AIR : LOWER: N/AV UPPER: N/AV

EXTINGUISHING MEDIA :

USE WATER FOG, DRY CHEMICAL OR CO₂. DO NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER.

SPECIAL FIRE FIGHTING PROCUEDURES AND PRECAUTIONS:

DO NOT ENTER CONFINED FIRE SPACE WITHOUT PROPER PROTECTITVE EQUIPMENT . COOL FIRE EXPOSED CONTAINERS SURROUNDING EQUIPMENT AND STRUCTURES WITH WATER.

7. HANDLING & STORAGE

HANDLING PRECAUTIONS: SPILLED MATERIAL MAY BE SLIPPERY. DO

NOT WASH SPILLED MATERIAL INTO

DRAINS. AVOID CONTACT WITH EYES. WEAR

FACE VISORS WHILE HANDLING HOT MATERIAL. AVOID PROLONGED SKIN CONTACT WASH HANDS WITH SOAP

& WATER AFTER HANDLING.

STORAGE CONDITIONS : ALWAYS STORE UNDER COVER AWAY FROM

SUNLIGHT AND SOURCES OF IGNITION IN

AN UPRIGHT POSITION.

8. PERSONAL PROTECTION

RESPIRATORY PROTECTION : NOT ORDINARILY REQUIRED. USE

BREATHING MASKS IF FUMES ARE

GENERATED WHILE IN USE

PROTECTIVE CLOTHING: USE OIL RESISTANT GLOVES AND OTHER

CLOTHING AS NEEDED TO MINIMIZE SKIN

CONTACT.

9. PHYSICAL DATA

PHYSICAL STATE : SEMI SOLID COLOUR : GREY BLACK

STRUCTURE : SMOOTH HOMOGENEOUS

DROPPING POINT(DEG. C) : 95 MIN.
UNWORKED PENETRATION AT 25 DEG C : 77

SOLUBILITY IN WATER : INSOLUBLE

10. REACTIVITY / STABILITY

STABILITY : STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS

TO AVOID

: AVOID HEAT, OPEN FLAME AND CONTACT WITH STRONG OXIDIZING

AGENTS.

HAZARDOUS DECOMPOSITION

PRODUCTS

: THERMAL DECOMPOSITION PRODUCTS

ARE HIGHLY DEPENDENT ON THE

COMBUSTION CONDITIONS. A COMPLEX MIXTURE OF AIRBORNE SOLID, LIQUID PARTICULATES AND GASES WILL EVOLVE WHEN THIS MATERIAL UNDERGOES PYROLYSIS OR COMBUSTION. CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON

COMBUSTION.

11. ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES : SCOOP UP EXCESS GREASE. CLEAN AREA

WITH APPROPRIATE CLEANER.

12. TRANSPORT HAZARDS

NOT CLASSIFIED AS HAZARDOUS FOR TRANSPORT.

13. REGULATORY INFORMATION

EC Classification : Not classified as dangerous under EC

criteria.

14. SPECIAL PRECAUTIONS

STORE IN UPRIGHT POSITION IN COOL, DRY PLACE WITH ADEQUATE VENTILATION. KEEP AWAY FROM OPEN FLAME AND HIGH TEMPERATURES.

MINIMIZE SKIN CONTACT. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. PROPERLY DISPOSE OF CONTAMINATED LEATHER ARTICLES, INCLUDING SHOES THAT CANNOT BE DECONTAMINATED.

15. OTHER INFORMATION

Compiled By : P&AD Department,

Bharat Petroleum Corporation Limited,

"A" Installation, Sewree (East),

Mumbai – 400 015.

Technical Contact No. : 9122 – 24176354

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