

Common Name: PENNZOIL SAE 5W-30 MOTOR OIL

Manufacturer: SHELL OIL PRODUCTS

SDS Revision Date: 8/27/2015

SDS Format: GHS-US

Item Number(s): 40GT25

Manufacturer Model Number(s):

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SAFETY DATA SHEET

ACCORDING TO OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200

VERSION: 1.3

REVISION DATE: 08/27/2015

PRINT DATE: 08/28/2015

SECTION 1. IDENTIFICATION



PRODUCT NAME: PENNZOIL SAE 5W-30 MOTOR OIL

PRODUCT CODE: 001D7517

MANUFACTURER OR SUPPLIER'S DETAILS:

MANUFACTURER/SUPPLIER:

SHELL OIL PRODUCTS US

P.O. BOX 4427

HOUSTON TX 77210-4427

USA

SDS REQUEST: (+1) 877-276-728

CUSTOMER SERVICE:

EMERGENCY TELEPHONE NUMBER:

SPILL INFORMATION: 877-504-9351

HEALTH INFORMATION: 877-242-7400

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:

RECOMMENDED USE: ENGINE OIL.

SECTION 2. HAZARDS IDENTIFICATION



GHS CLASSIFICATION: NOT A HAZARDOUS SUBSTANCE OR MIXTURE.

GHS LABEL ELEMENT:

HAZARD PICTOGRAMS: NO HAZARD SYMBOL REQUIRED

SIGNAL WORD: NO SIGNAL WORD

HAZARD STATEMENTS:

PHYSICAL HAZARDS: NOT CLASSIFIED AS A PHYSICAL HAZARD UNDER GHS CRITERIA.

HEALTH HAZARDS: NOT CLASSIFIED AS A HEALTH HAZARD UNDER GHS CRITERIA.

ENVIRONMENTAL HAZARDS:

NOT CLASSIFIED AS AN ENVIRONMENTAL HAZARD UNDER GHS CRITERIA.

PRECAUTIONARY STATEMENTS:

PREVENTION: NO PRECAUTIONARY PHRASES.

RESPONSE: NO PRECAUTIONARY PHRASES.

STORAGE: NO PRECAUTIONARY PHRASES.

DISPOSAL: NO PRECAUTIONARY PHRASES.

OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION:

PROLONGED OR REPEATED SKIN CONTACT WITHOUT PROPER CLEANING CAN CLOG THE PORES OF THE SKIN RESULTING IN DISORDERS SUCH AS OIL ACNE/FOLLICULITIS.

USED OIL MAY CONTAIN HARMFUL IMPURITIES.

NOT CLASSIFIED AS FLAMMABLE BUT WILL BURN.

THE CLASSIFICATION OF THIS MATERIAL IS BASED ON OSHA HCS 2012 CRITERIA.

UNDER NORMAL CONDITIONS OF USE OR IN A FORESEEABLE EMERGENCY, THIS PRODUCT DOES NOT MEET THE DEFINITION OF A HAZARDOUS CHEMICAL WHEN EVALUATED ACCORDING TO THE OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS



CHEMICAL NATURE:

HIGHLY REFINED MINERAL OILS AND ADDITIVES.

THE HIGHLY REFINED MINERAL OIL CONTAINS <3% (W/W) DMSOEXTRACT, ACCORDING TO IP346.

* CONTAINS ONE OR MORE OF THE FOLLOWING CAS-NUMBERS:

64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 68037-01-4, 72623-86-0, 72623-87-1, 8042-47-5, 848301-69-9.

HAZARDOUS COMPONENTS:

| CHEMICAL NAME | SYNONYMS | CAS-NO. | CONCENTRATION (%) |
|---|----------|--------------|-------------------|
| POLYOLEFIN AMIDE ALKENEAMINE POLYOL | | NOT ASSIGNED | 1 - 3 |
| ALKARYL AMINE | | NOT ASSIGNED | 1 - 3 |
| INTERCHANGEABLE LOW VISCOSITY BASE OIL (<20,5 CST @40 DEG. C) * | | NOT ASSIGNED | 0 - 90 |

SECTION 4. FIRST-AID MEASURES



GENERAL ADVICE:

NOT EXPECTED TO BE A HEALTH HAZARD WHEN USED UNDER NORMAL CONDITIONS.

IF INHALED:

NO TREATMENT NECESSARY UNDER NORMAL CONDITIONS OF USE.
IF SYMPTOMS PERSIST, OBTAIN MEDICAL ADVICE.

IN CASE OF SKIN CONTACT:

REMOVE CONTAMINATED CLOTHING. FLUSH EXPOSED AREA WITH WATER AND FOLLOW BY WASHING WITH SOAP IF AVAILABLE.

IF PERSISTENT IRRITATION OCCURS, OBTAIN MEDICAL ATTENTION.

IN CASE OF EYE CONTACT:

FLUSH EYE WITH COPIOUS QUANTITIES OF WATER.
IF PERSISTENT IRRITATION OCCURS, OBTAIN MEDICAL ATTENTION.

IF SWALLOWED:

IN GENERAL NO TREATMENT IS NECESSARY UNLESS LARGE QUANTITIES ARE SWALLOWED, HOWEVER, GET MEDICAL ADVICE.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
OIL ACNE/FOLLICULITIS SIGNS AND SYMPTOMS MAY INCLUDE FORMATION OF BLACK PUSTULES AND SPOTS ON THE SKIN OF EXPOSED AREAS.

INGESTION MAY RESULT IN NAUSEA, VOMITING AND/OR DIARRHOEA.

PROTECTION OF FIRST-AIDERS:

WHEN ADMINISTERING FIRST AID, ENSURE THAT YOU ARE WEARING THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT ACCORDING TO THE INCIDENT, INJURY AND SURROUNDINGS.

IMMEDIATE MEDICAL ATTENTION, SPECIAL TREATMENT: TREAT SYMPTOMATICALLY.

SECTION 5. FIRE-FIGHTING MEASURES



SUITABLE EXTINGUISHING MEDIA:

FOAM, WATER SPRAY OR FOG. DRY CHEMICAL POWDER, CARBON DIOXIDE, SAND OR EARTH MAY BE USED FOR SMALL FIRES ONLY.

UNSUITABLE EXTINGUISHING MEDIA: DO NOT USE WATER IN A JET.

SPECIFIC HAZARDS DURING FIREFIGHTING:

HAZARDOUS COMBUSTION PRODUCTS MAY INCLUDE:

A COMPLEX MIXTURE OF AIRBORNE SOLID AND LIQUID PARTICULATES AND GASES (SMOKE).

CARBON MONOXIDE MAY BE EVOLVED IF INCOMPLETE COMBUSTION OCCURS.

UNIDENTIFIED ORGANIC AND INORGANIC COMPOUNDS.

SPECIFIC EXTINGUISHING METHODS:

USE EXTINGUISHING MEASURES THAT ARE APPROPRIATE TO LOCAL CIRCUMSTANCES AND THE SURROUNDING ENVIRONMENT.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

PROPER PROTECTIVE EQUIPMENT INCLUDING CHEMICAL RESISTANT GLOVES ARE TO BE WORN; CHEMICAL RESISTANT SUIT IS INDICATED IF LARGE CONTACT WITH SPILLED PRODUCT IS EXPECTED. SELF-CONTAINED BREATHING APPARATUS MUST BE WORN WHEN APPROACHING A FIRE IN A CONFINED SPACE. SELECT FIRE FIGHTER'S CLOTHING APPROVED TO RELEVANT STANDARDS (E.G. EUROPE: EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES



PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
AVOID CONTACT WITH SKIN AND EYES.

ENVIRONMENTAL PRECAUTIONS:

USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION. PREVENT FROM SPREADING OR ENTERING DRAINS, DITCHES OR RIVERS BY USING SAND, EARTH, OR OTHER APPROPRIATE BARRIERS.

LOCAL AUTHORITIES SHOULD BE ADVISED IF SIGNIFICANT SPILLAGES CANNOT BE CONTAINED.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

SLIPPERY WHEN SPILT. AVOID ACCIDENTS, CLEAN UP IMMEDIATELY.

PREVENT FROM SPREADING BY MAKING A BARRIER WITH SAND, EARTH OR OTHER CONTAINMENT MATERIAL.

RECLAIM LIQUID DIRECTLY OR IN AN ABSORBENT.

SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND OR OTHER SUITABLE MATERIAL AND DISPOSE OF PROPERLY.

ADDITIONAL ADVICE:

FOR GUIDANCE ON SELECTION OF PERSONAL PROTECTIVE EQUIPMENT SEE CHAPTER 8 OF THIS SAFETY DATA SHEET.

FOR GUIDANCE ON DISPOSAL OF SPILLED MATERIAL SEE CHAPTER 13 OF THIS SAFETY DATA SHEET.

SECTION 7. HANDLING AND STORAGE



TECHNICAL MEASURES:

USE LOCAL EXHAUST VENTILATION IF THERE IS RISK OF INHALATION OF VAPOURS, MISTS OR AEROSOLS.

USE THE INFORMATION IN THIS DATA SHEET AS INPUT TO A RISK ASSESSMENT OF LOCAL CIRCUMSTANCES TO HELP DETERMINE APPROPRIATE CONTROLS FOR SAFE HANDLING, STORAGE AND DISPOSAL OF THIS MATERIAL.

PRECAUTIONS FOR SAFE HANDLING:

AVOID PROLONGED OR REPEATED CONTACT WITH SKIN.

AVOID INHALING VAPOUR AND/OR MISTS.

WHEN HANDLING PRODUCT IN DRUMS, SAFETY FOOTWEAR SHOULD BE WORN AND PROPER HANDLING EQUIPMENT SHOULD BE USED.

PROPERLY DISPOSE OF ANY CONTAMINATED RAGS OR CLEANING MATERIALS IN ORDER TO PREVENT FIRES.

AVOIDANCE OF CONTACT: STRONG OXIDISING AGENTS.

PRODUCT TRANSFER:

THIS MATERIAL HAS THE POTENTIAL TO BE A STATIC ACCUMULATOR.

PROPER GROUNDING AND BONDING PROCEDURES SHOULD BE USED DURING ALL BULK TRANSFER OPERATIONS.

STORAGE:

OTHER DATA:

KEEP CONTAINER TIGHTLY CLOSED AND IN A COOL, WELL-VENTILATED PLACE.

USE PROPERLY LABELED AND CLOSABLE CONTAINERS.

STORE AT AMBIENT TEMPERATURE.

PACKAGING MATERIAL:

SUITABLE MATERIAL:

FOR CONTAINERS OR CONTAINER LININGS, USE MILD STEEL OR HIGH DENSITY POLYETHYLENE.

UNSUITABLE MATERIAL: PVC.

CONTAINER ADVICE:

POLYETHYLENE CONTAINERS SHOULD NOT BE EXPOSED TO HIGH TEMPERATURES BECAUSE OF POSSIBLE RISK OF DISTORTION.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION



COMPONENTS WITH WORKPLACE CONTROL PARAMETERS:

| COMPONENTS | CAS-NO. | VALUE TYPE (FORM OF EXPOSURE) | CONTROL PARAMETERS / PERMISSIBLE CONCENTRATION | BASIS |
|-------------------|--------------|-------------------------------------|---|--|
| OIL MIST, MINERAL | NOT ASSIGNED | TWA ((INHALABLE FRACTION)) | 5 MG/M3 | US. ACGIH THRESHOLD LIMIT VALUES |
| | | (MIST) | 5 MG/M3 | OSHA_TRANS |

BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS: NO BIOLOGICAL LIMIT ALLOCATED.

MONITORING METHODS:

MONITORING OF THE CONCENTRATION OF SUBSTANCES IN THE BREATHING ZONE OF WORKERS OR IN THE GENERAL WORKPLACE MAY BE REQUIRED TO CONFIRM COMPLIANCE WITH AN OEL AND ADEQUACY OF EXPOSURE CONTROLS. FOR SOME SUBSTANCES BIOLOGICAL MONITORING MAY ALSO BE APPROPRIATE.

VALIDATED EXPOSURE MEASUREMENT METHODS SHOULD BE APPLIED BY A COMPETENT PERSON AND SAMPLES ANALYSED BY AN ACCREDITED LABORATORY.

EXAMPLES OF SOURCES OF RECOMMENDED EXPOSURE MEASUREMENT METHODS ARE GIVEN BELOW OR CONTACT THE SUPPLIER. FURTHER NATIONAL METHODS MAY BE AVAILABLE.

NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH), USA:
MANUAL OF ANALYTICAL METHODS [HTTP://WWW.CDC.GOV/NIOSH/](http://www.cdc.gov/niosh/)

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), USA:
SAMPLING AND ANALYTICAL METHODS [HTTP://WWW.OSHA.GOV/](http://www.osha.gov/)

HEALTH AND SAFETY EXECUTIVE (HSE), UK:
METHODS FOR THE DETERMINATION OF HAZARDOUS SUBSTANCES
[HTTP://WWW.HSE.GOV.UK/](http://www.hse.gov.uk/)

INSTITUT FUR ARBEITSSCHUTZ DEUTSCHEN GESETZLICHEN UNFALLVERSICHERUNG
(IFA), GERMANY [HTTP://WWW.DGUV.DE/INHALT/INDEX.JSP](http://www.dguv.de/inhalt/index.jsp)

L'INSTITUT NATIONAL DE RECHERCHE ET DE SECURITE, (INRS), FRANCE
[HTTP://WWW.INRS.FR/ACCUEIL](http://www.inrs.fr/accueil)

ENGINEERING MEASURES:

THE LEVEL OF PROTECTION AND TYPES OF CONTROLS NECESSARY WILL VARY
DEPENDING UPON POTENTIAL EXPOSURE CONDITIONS. SELECT CONTROLS BASED ON A
RISK ASSESSMENT OF LOCAL CIRCUMSTANCES.

APPROPRIATE MEASURES INCLUDE:

ADEQUATE VENTILATION TO CONTROL AIRBORNE CONCENTRATIONS.

WHERE MATERIAL IS HEATED, SPRAYED OR MIST FORMED, THERE IS
GREATER POTENTIAL FOR AIRBORNE CONCENTRATIONS TO BE GENERATED.

GENERAL INFORMATION:

DEFINE PROCEDURES FOR SAFE HANDLING AND MAINTENANCE OF CONTROLS.

EDUCATE AND TRAIN WORKERS IN THE HAZARDS AND CONTROL MEASURES RELEVANT TO
NORMAL ACTIVITIES ASSOCIATED WITH THIS PRODUCT. ENSURE APPROPRIATE
SELECTION, TESTING AND MAINTENANCE OF EQUIPMENT USED TO CONTROL EXPOSURE,
E.G. PERSONAL PROTECTIVE EQUIPMENT, LOCAL EXHAUST VENTILATION.

DRAIN DOWN SYSTEM PRIOR TO EQUIPMENT BREAK-IN OR MAINTENANCE.

RETAIN DRAIN DOWNS IN SEALED STORAGE PENDING DISPOSAL OR SUBSEQUENT
RECYCLE.

ALWAYS OBSERVE GOOD PERSONAL HYGIENE MEASURES, SUCH AS WASHING HANDS AFTER
HANDLING THE MATERIAL AND BEFORE EATING, DRINKING, AND/OR SMOKING.
ROUTINELY WASH WORK CLOTHING AND PROTECTIVE EQUIPMENT TO REMOVE
CONTAMINANTS. DISCARD CONTAMINATED CLOTHING AND FOOTWEAR THAT CANNOT
BE CLEANED. PRACTICE GOOD HOUSEKEEPING.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION:

NO RESPIRATORY PROTECTION IS ORDINARILY REQUIRED UNDER NORMAL CONDITIONS
OF USE.

IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE PRACTICES, PRECAUTIONS SHOULD
BE TAKEN TO AVOID BREATHING OF MATERIAL.

IF ENGINEERING CONTROLS DO NOT MAINTAIN AIRBORNE CONCENTRATIONS TO A LEVEL
WHICH IS ADEQUATE TO PROTECT WORKER HEALTH, SELECT RESPIRATORY PROTECTION
EQUIPMENT SUITABLE FOR THE SPECIFIC CONDITIONS OF USE AND MEETING RELEVANT
LEGISLATION.

CHECK WITH RESPIRATORY PROTECTIVE EQUIPMENT SUPPLIERS.

WHERE AIR-FILTERING RESPIRATORS ARE SUITABLE, SELECT AN APPROPRIATE
COMBINATION OF MASK AND FILTER.

SELECT A FILTER SUITABLE FOR THE COMBINATION OF ORGANIC GASES AND VAPOURS
[TYPE A/TYPE P BOILING POINT >65 DEG. C (149 DEG. F)].

HAND PROTECTION:

REMARKS:

WHERE HAND CONTACT WITH THE PRODUCT MAY OCCUR THE USE OF GLOVES APPROVED TO RELEVANT STANDARDS (E.G. EUROPE: EN374, US: F739) MADE FROM THE FOLLOWING MATERIALS MAY PROVIDE SUITABLE CHEMICAL PROTECTION. PVC, NEOPRENE OR NITRILE RUBBER GLOVES SUITABILITY AND DURABILITY OF A GLOVE IS DEPENDENT ON USAGE, E.G. FREQUENCY AND DURATION OF CONTACT, CHEMICAL RESISTANCE OF GLOVE MATERIAL, DEXTERITY. ALWAYS SEEK ADVICE FROM GLOVE SUPPLIERS. CONTAMINATED GLOVES SHOULD BE REPLACED. PERSONAL HYGIENE IS A KEY ELEMENT OF EFFECTIVE HAND CARE. GLOVES MUST ONLY BE WORN ON CLEAN HANDS. AFTER USING GLOVES, HANDS SHOULD BE WASHED AND DRIED THOROUGHLY. APPLICATION OF A NON-PERFUMED MOISTURIZER IS RECOMMENDED.

FOR CONTINUOUS CONTACT WE RECOMMEND GLOVES WITH BREAKTHROUGH TIME OF MORE THAN 240 MINUTES WITH PREFERENCE FOR >480 MINUTES WHERE SUITABLE GLOVES CAN BE IDENTIFIED. FOR SHORT-TERM/SPLASH PROTECTION WE RECOMMEND THE SAME, BUT RECOGNIZE THAT SUITABLE GLOVES OFFERING THIS LEVEL OF PROTECTION MAY NOT BE AVAILABLE AND IN THIS CASE A LOWER BREAKTHROUGH TIME MAYBE ACCEPTABLE SO LONG AS APPROPRIATE MAINTENANCE AND REPLACEMENT REGIMES ARE FOLLOWED. GLOVE THICKNESS IS NOT A GOOD PREDICTOR OF GLOVE RESISTANCE TO A CHEMICAL AS IT IS DEPENDENT ON THE EXACT COMPOSITION OF THE GLOVE MATERIAL. GLOVE THICKNESS SHOULD BE TYPICALLY GREATER THAN 0.35 MM DEPENDING ON THE GLOVE MAKE AND MODEL.

EYE PROTECTION:

IF MATERIAL IS HANDLED SUCH THAT IT COULD BE SPLASHED INTO EYES, PROTECTIVE EYEWEAR IS RECOMMENDED.

SKIN AND BODY PROTECTION:

SKIN PROTECTION IS NOT ORDINARILY REQUIRED BEYOND STANDARD WORK CLOTHES. IT IS GOOD PRACTICE TO WEAR CHEMICAL RESISTANT GLOVES.

PROTECTIVE MEASURES:

PERSONAL PROTECTIVE EQUIPMENT (PPE) SHOULD MEET RECOMMENDED NATIONAL STANDARDS. CHECK WITH PPE SUPPLIERS.

ENVIRONMENTAL EXPOSURE CONTROLS:

GENERAL ADVICE:

TAKE APPROPRIATE MEASURES TO FULFILL THE REQUIREMENTS OF RELEVANT ENVIRONMENTAL PROTECTION LEGISLATION. AVOID CONTAMINATION OF THE ENVIRONMENT BY FOLLOWING ADVICE GIVEN IN CHAPTER 6. IF NECESSARY, PREVENT UNDISSOLVED MATERIAL FROM BEING DISCHARGED TO WASTE WATER. WASTE WATER SHOULD BE TREATED IN A MUNICIPAL OR INDUSTRIAL WASTE WATER TREATMENT PLANT BEFORE DISCHARGE TO SURFACE WATER.

LOCAL GUIDELINES ON EMISSION LIMITS FOR VOLATILE SUBSTANCES MUST BE OBSERVED FOR THE DISCHARGE OF EXHAUST AIR CONTAINING VAPOUR.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES



APPEARANCE: LIQUID AT ROOM TEMPERATURE.

COLOUR: AMBER

ODOUR: SLIGHT HYDROCARBON

ODOUR THRESHOLD: DATA NOT AVAILABLE

PH: NOT APPLICABLE

POUR POINT: -42 DEG. C / -44 DEG. F
METHOD: ASTM D97

INITIAL BOILING POINT AND BOILING RANGE:
>280 DEG. C / 536 DEG. F. ESTIMATED VALUE(S)

FLASH POINT: ≥ 230 DEG. C / ≥ 446 DEG. F
METHOD: ASTM D92

EVAPORATION RATE: DATA NOT AVAILABLE

FLAMMABILITY (SOLID, GAS): DATA NOT AVAILABLE

UPPER EXPLOSION LIMIT: TYPICAL 10 % (V)

LOWER EXPLOSION LIMIT: TYPICAL 1 % (V)

VAPOUR PRESSURE: < 0.5 PA (20 DEG. C / 68 DEG. F) ESTIMATED VALUE(S)

RELATIVE VAPOUR DENSITY: > 1 ESTIMATED VALUE(S)

RELATIVE DENSITY: 0.863 (15 DEG. C / 59 DEG. F)

DENSITY: 863 KG/M³ (15.0 DEG. C / 59.0 DEG. F)

METHOD: UNSPECIFIED

SOLUBILITY (IES):

WATER SOLUBILITY: NEGLIGIBLE

SOLUBILITY IN OTHER SOLVENTS: DATA NOT AVAILABLE

PARTITION COEFFICIENT N-OCTANOL/WATER:

POW: > 6 (BASED ON INFORMATION ON SIMILAR PRODUCTS)

AUTO-IGNITION TEMPERATURE: > 320 DEG. C / 608 DEG. F

VISCOSITY:

VISCOSITY, DYNAMIC: DATA NOT AVAILABLE

VISCOSITY, KINEMATIC:

63.4 MM²/S (40.0 DEG. C / 104.0 DEG. F)

METHOD: ASTM D445

10.6 MM²/S (100 DEG. C / 212 DEG. F)

METHOD: ASTM D445

CONDUCTIVITY:

THIS MATERIAL IS NOT EXPECTED TO BE A STATIC ACCUMULATOR.

DECOMPOSITION TEMPERATURE: DATA NOT AVAILABLE

SECTION 10. STABILITY AND REACTIVITY



REACTIVITY:

THE PRODUCT DOES NOT POSE ANY FURTHER REACTIVITY HAZARDS IN ADDITION TO THOSE LISTED IN THE FOLLOWING SUB-PARAGRAPH.

CHEMICAL STABILITY: STABLE.

POSSIBILITY OF HAZARDOUS REACTIONS: REACTS WITH STRONG OXIDISING AGENTS.

CONDITIONS TO AVOID:

EXTREMES OF TEMPERATURE AND DIRECT SUNLIGHT.

INCOMPATIBLE MATERIALS: STRONG OXIDISING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS:

HAZARDOUS DECOMPOSITION PRODUCTS ARE NOT EXPECTED TO FORM DURING NORMAL STORAGE.

SECTION 11. TOXICOLOGICAL INFORMATION



BASIS FOR ASSESSMENT:

INFORMATION GIVEN IS BASED ON DATA ON THE COMPONENTS AND THE TOXICOLOGY OF SIMILAR PRODUCTS. UNLESS INDICATED OTHERWISE, THE DATA PRESENTED IS REPRESENTATIVE OF THE PRODUCT AS A WHOLE, RATHER THAN FOR INDIVIDUAL COMPONENT(S).

INFORMATION ON LIKELY ROUTES OF EXPOSURE:

SKIN AND EYE CONTACT ARE THE PRIMARY ROUTES OF EXPOSURE ALTHOUGH EXPOSURE MAY OCCUR FOLLOWING ACCIDENTAL INGESTION.

ACUTE TOXICITY:

PRODUCT:

ACUTE ORAL TOXICITY:

LD50 (RAT): >5,000 MG/KG

REMARKS: EXPECTED TO BE OF LOW TOXICITY

ACUTE INHALATION TOXICITY:

REMARKS:

NOT CONSIDERED TO BE AN INHALATION HAZARD UNDER NORMAL CONDITIONS OF USE.

ACUTE DERMAL TOXICITY:

LD50 (RABBIT): >5,000 MG/KG

REMARKS: EXPECTED TO BE OF LOW TOXICITY

SKIN CORROSION/IRRITATION:

PRODUCT:

REMARKS:

EXPECTED TO BE SLIGHTLY IRRITATING., PROLONGED OR REPEATED SKIN CONTACT WITHOUT PROPER CLEANING CAN CLOG THE PORES OF THE SKIN RESULTING IN DISORDERS SUCH AS OIL ACNE/FOLLICULITIS.

SERIOUS EYE DAMAGE/EYE IRRITATION:

PRODUCT:

REMARKS: EXPECTED TO BE SLIGHTLY IRRITATING.

RESPIRATORY OR SKIN SENSITISATION:

PRODUCT:

REMARKS: NOT EXPECTED TO BE A SKIN SENSITISER.

GERM CELL MUTAGENICITY:

PRODUCT:

REMARKS: NOT CONSIDERED A MUTAGENIC HAZARD.

CARCINOGENICITY:

PRODUCT:

REMARKS: NOT EXPECTED TO BE CARCINOGENIC.

REMARKS:

PRODUCT CONTAINS MINERAL OILS OF TYPES SHOWN TO BE NON-CARCINOGENIC IN ANIMAL SKINPAINTING STUDIES., HIGHLY REFINED MINERAL OILS ARE NOT CLASSIFIED AS CARCINOGENIC BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC).

IARC:

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC.

ACGIH:

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY ACGIH.

OSHA:

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY OSHA.

NTP:

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP.

REPRODUCTIVE TOXICITY:

PRODUCT:

REMARKS:

NOT EXPECTED TO IMPAIR FERTILITY., NOT EXPECTED TO BE A DEVELOPMENTAL TOXICANT.

STOT - SINGLE EXPOSURE:

PRODUCT:

REMARKS: NOT EXPECTED TO BE A HAZARD.

STOT - REPEATED EXPOSURE:

PRODUCT:

REMARKS: NOT EXPECTED TO BE A HAZARD.

ASPIRATION TOXICITY:

PRODUCT:

NOT CONSIDERED AN ASPIRATION HAZARD.

FURTHER INFORMATION:

PRODUCT:

REMARKS:

USED OILS MAY CONTAIN HARMFUL IMPURITIES THAT HAVE ACCUMULATED DURING USE. THE CONCENTRATION OF SUCH IMPURITIES WILL DEPEND ON USE AND THEY MAY PRESENT RISKS TO HEALTH AND THE ENVIRONMENT ON DISPOSAL., ALL USED OIL SHOULD BE HANDLED WITH CAUTION AND SKIN CONTACT AVOIDED AS FAR AS POSSIBLE.

REMARKS:

CONTINUOUS CONTACT WITH USED ENGINE OILS HAS CAUSED SKIN CANCER IN ANIMAL TESTS.

REMARKS: SLIGHTLY IRRITATING TO RESPIRATORY SYSTEM.

SECTION 12. ECOLOGICAL INFORMATION



BASIS FOR ASSESSMENT:

ECOTOXICOLOGICAL DATA HAVE NOT BEEN DETERMINED SPECIFICALLY FOR THIS PRODUCT.

INFORMATION GIVEN IS BASED ON A KNOWLEDGE OF THE COMPONENTS AND THE ECOTOXICOLOGY OF SIMILAR PRODUCTS.

UNLESS INDICATED OTHERWISE, THE DATA PRESENTED IS REPRESENTATIVE OF THE PRODUCT AS A WHOLE, RATHER THAN FOR INDIVIDUAL COMPONENT(S). (LL/EL/IL50 EXPRESSED AS THE NOMINAL AMOUNT OF PRODUCT REQUIRED TO PREPARE AQUEOUS

TEST EXTRACT).

ECOTOXICITY:

PRODUCT:

TOXICITY TO FISH (ACUTE TOXICITY):

REMARKS:

EXPECTED TO BE PRACTICALLY NON TOXIC:
LL/EL/IL50: >100 MG/L

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES (ACUTE TOXICITY):

REMARKS:

EXPECTED TO BE PRACTICALLY NON TOXIC:
LL/EL/IL50: >100 MG/L

TOXICITY TO ALGAE (ACUTE TOXICITY):

REMARKS:

EXPECTED TO BE PRACTICALLY NON TOXIC:
LL/EL/IL50: >100 MG/L

TOXICITY TO FISH (CHRONIC TOXICITY):

REMARKS: DATA NOT AVAILABLE

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES (CHRONIC TOXICITY):

REMARKS: DATA NOT AVAILABLE

TOXICITY TO BACTERIA (ACUTE TOXICITY):

REMARKS: DATA NOT AVAILABLE

PERSISTENCE AND DEGRADABILITY:

PRODUCT:

BIODEGRADABILITY:

REMARKS:

EXPECTED TO BE NOT READILY BIODEGRADABLE. MAJOR CONSTITUENTS ARE EXPECTED TO BE INHERENTLY BIODEGRADABLE, BUT CONTAINS COMPONENTS THAT MAY PERSIST IN THE ENVIRONMENT.

BIOACCUMULATIVE POTENTIAL:

PRODUCT:

BIOACCUMULATION:

REMARKS: CONTAINS COMPONENTS WITH THE POTENTIAL TO BIOACCUMULATE.

MOBILITY IN SOIL:

PRODUCT:

MOBILITY:

REMARKS:

LIQUID UNDER MOST ENVIRONMENTAL CONDITIONS. IF IT ENTERS SOIL, IT WILL ADSORB TO SOIL PARTICLES AND WILL NOT BE MOBILE.

REMARKS: FLOATS ON WATER.

OTHER ADVERSE EFFECTS: NO DATA AVAILABLE

PRODUCT:

ADDITIONAL ECOLOGICAL INFORMATION:

PRODUCT IS A MIXTURE OF NON-VOLATILE COMPONENTS, WHICH ARE NOT EXPECTED TO BE RELEASED TO AIR IN ANY SIGNIFICANT QUANTITIES.

NOT EXPECTED TO HAVE OZONE DEPLETION POTENTIAL, PHOTOCHEMICAL OZONE CREATION POTENTIAL OR GLOBAL WARMING POTENTIAL.

POORLY SOLUBLE MIXTURE.

MAY CAUSE PHYSICAL FOULING OF AQUATIC ORGANISMS.

MINERAL OIL IS NOT EXPECTED TO CAUSE ANY CHRONIC EFFECTS TO AQUATIC ORGANISMS AT CONCENTRATIONS LESS THAN 1 MG/L.

SECTION 13. DISPOSAL CONSIDERATIONS



DISPOSAL METHODS:

WASTE FROM RESIDUES:

WASTE PRODUCT SHOULD NOT BE ALLOWED TO CONTAMINATE SOIL OR GROUND WATER, OR BE DISPOSED OF INTO THE ENVIRONMENT.

WASTE, SPILLS OR USED PRODUCT IS DANGEROUS WASTE.

DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL, AND LOCAL LAWS AND REGULATIONS.

LOCAL REGULATIONS MAY BE MORE STRINGENT THAN REGIONAL OR NATIONAL REQUIREMENTS AND MUST BE COMPLIED WITH.

CONTAMINATED PACKAGING:

DISPOSE IN ACCORDANCE WITH PREVAILING REGULATIONS, PREFERABLY TO A RECOGNIZED COLLECTOR OR CONTRACTOR. THE COMPETENCE OF THE COLLECTOR OR CONTRACTOR SHOULD BE ESTABLISHED BEFOREHAND. DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL, AND LOCAL LAWS AND REGULATIONS.

SECTION 14. TRANSPORT INFORMATION



NATIONAL REGULATIONS:

US DEPARTMENT OF TRANSPORTATION CLASSIFICATION (49 CFR PARTS 171-180):
NOT REGULATED AS A DANGEROUS GOOD

INTERNATIONAL REGULATION:

IATA-DGR: NOT REGULATED AS A DANGEROUS GOOD

IMDG-CODE: NOT REGULATED AS A DANGEROUS GOOD

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:

POLLUTION CATEGORY: NOT APPLICABLE

SHIP TYPE: NOT APPLICABLE

PRODUCT NAME: NOT APPLICABLE

SPECIAL PRECAUTIONS: NOT APPLICABLE

SPECIAL PRECAUTIONS FOR USER:

REMARKS:

SPECIAL PRECAUTIONS:

REFER TO CHAPTER 7, HANDLING & STORAGE, FOR SPECIAL PRECAUTIONS WHICH A USER NEEDS TO BE AWARE OF OR NEEDS TO COMPLY WITH IN CONNECTION WITH TRANSPORT.

ADDITIONAL INFORMATION:

MARPOL ANNEX 1 RULES APPLY FOR BULK SHIPMENTS BY SEA.

SECTION 15. REGULATORY INFORMATION



OSHA HAZARDS: NO OSHA HAZARDS

EPCRA - EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT:

CERCLA REPORTABLE QUANTITY

THIS MATERIAL DOES NOT CONTAIN ANY COMPONENTS WITH A CERCLA RQ., SHELL CLASSIFIES THIS MATERIAL AS AN "OIL" UNDER THE CERCLA PETROLEUM EXCLUSION, THEREFORE RELEASES TO THE ENVIRONMENT ARE NOT REPORTABLE UNDER CERCLA.

SARA 304 EXTREMELY HAZARDOUS SUBSTANCES REPORTABLE QUANTITY:

THIS MATERIAL DOES NOT CONTAIN ANY COMPONENTS WITH A SECTION 304 EHS RQ.

SARA 311/312 HAZARDS: NO SARA HAZARDS

SARA 302:

NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.

SARA 313:

THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

CLEAN WATER ACT:

THIS PRODUCT DOES NOT CONTAIN ANY HAZARDOUS CHEMICALS LISTED UNDER THE U.S. CLEANWATER ACT, SECTION 311, TABLE 117.3.

CALIFORNIA PROP 65:

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

THE COMPONENTS OF THIS PRODUCT ARE REPORTED IN THE FOLLOWING INVENTORIES:

EINECS: ALL COMPONENTS LISTED OR POLYMER EXEMPT.

TSCA: ALL COMPONENTS LISTED.

DSL: ALL COMPONENTS LISTED.

SECTION 16. OTHER INFORMATION



FURTHER INFORMATION:

NFPA RATING:

HEALTH 0

FIRE 1

REACTIVITY 0

A VERTICAL BAR (|) IN THE LEFT MARGIN INDICATES AN AMENDMENT FROM THE PREVIOUS VERSION.

ABBREVIATIONS AND ACRONYMS:

THE STANDARD ABBREVIATIONS AND ACRONYMS USED IN THIS DOCUMENT CAN BE LOOKED UP IN REFERENCE LITERATURE (E.G. SCIENTIFIC DICTIONARIES) AND/OR WEBSITES.

ACGIH:

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

ADR:

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD

AICS: AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES

ASTM: AMERICAN SOCIETY FOR TESTING AND MATERIALS

BEL: BIOLOGICAL EXPOSURE LIMITS

BTEX: BENZENE, TOLUENE, ETHYLBENZENE, XYLENES

CAS: CHEMICAL ABSTRACTS SERVICE

CEFIC: EUROPEAN CHEMICAL INDUSTRY COUNCIL

CLP: CLASSIFICATION PACKAGING AND LABELLING

COC: CLEVELAND OPEN-CUP

DIN: DEUTSCHES INSTITUT FUR NORMUNG

DMEL: DERIVED MINIMAL EFFECT LEVEL

DNEL: DERIVED NO EFFECT LEVEL

DSL: CANADA DOMESTIC SUBSTANCE LIST

EC: EUROPEAN COMMISSION

EC50: EFFECTIVE CONCENTRATION FIFTY

ECETOC:
EUROPEAN CENTER ON ECOTOXICOLOGY AND TOXICOLOGY OF CHEMICALS

ECHA: EUROPEAN CHEMICALS AGENCY

EINECS:
THE EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES

EL50: EFFECTIVE LOADING FIFTY

ENCS:
JAPANESE EXISTING AND NEW CHEMICAL SUBSTANCES INVENTORY

EWC: EUROPEAN WASTE CODE

GHS:
GLOBALLY HARMONISED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IATA: INTERNATIONAL AIR TRANSPORT ASSOCIATION

IC50: INHIBITORY CONCENTRATION FIFTY

IL50: INHIBITORY LEVEL FIFTY

IMDG: INTERNATIONAL MARITIME DANGEROUS GOODS

INV: CHINESE CHEMICALS INVENTORY

IP346:
INSTITUTE OF PETROLEUM TEST METHOD N DEG. 346 FOR THE DETERMINATION OF
POLYCYCLIC AROMATICS DMSO-EXTRACTABLES

KECI: KOREA EXISTING CHEMICALS INVENTORY

LC50: LETHAL CONCENTRATION FIFTY

LD50: LETHAL DOSE FIFTY PER CENT.

LL/EL/IL: LETHAL LOADING/EFFECTIVE LOADING/INHIBITORY LOADING

LL50: LETHAL LOADING FIFTY

MARPOL:

INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS

NOEC/NOEL:

NO OBSERVED EFFECT CONCENTRATION / NO OBSERVED EFFECT LEVEL

OE_HP: OCCUPATIONAL EXPOSURE - HIGH PRODUCTION VOLUME

PBT: PERSISTENT, BIOACCUMULATIVE AND TOXIC

PICCS:

PHILIPPINE INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES

PNEC: PREDICTED NO EFFECT CONCENTRATION

REACH: REGISTRATION EVALUATION AND AUTHORISATION OF
CHEMICALS

RID:

REGULATIONS RELATING TO INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY RAIL

SKIN_DES: SKIN DESIGNATION

STEL: SHORT TERM EXPOSURE LIMIT

TRA: TARGETED RISK ASSESSMENT

TSCA: US TOXIC SUBSTANCES CONTROL ACT

TWA: TIME-WEIGHTED AVERAGE

VPVB: VERY PERSISTENT AND VERY BIOACCUMULATIVE

THIS INFORMATION IS BASED ON OUR CURRENT KNOWLEDGE AND IS INTENDED TO
DESCRIBE THE PRODUCT FOR THE PURPOSES OF HEALTH, SAFETY AND ENVIRONMENTAL
REQUIREMENTS ONLY. IT SHOULD NOT THEREFORE BE CONSTRUED AS GUARANTEEING
ANY SPECIFIC PROPERTY OF THE PRODUCT.

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