

CLEAN HARBORS ENERGY & INDUSTRIAL SERVICES CORP.
15715 121A AVENUE
EDMONTON
AB CANADA
780-451-6969

PRODUCT: PARATENE® S-620

CODE: 241029

Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER/SUPPLIER..... CLEAN HARBORS ENERGY & INDUSTRIAL SERVICES CORP.
15715 121A AVENUE
EDMONTON
AB
T5V 1B1
780-451-6969
PREPARED BY..... Regulatory Affairs
PREPARATION DATE..... Oct06/11
PRODUCT NAME..... PARATENE® S-620
PRODUCT CODE..... 241029
CHEMICAL FORMULA..... BLEND.
CHEMICAL FAMILY..... BLEND.
MATERIAL USE..... REFER TO TECHNICAL LITERATURE.
EMERGENCY PHONE NO..... 780-451-6969.

Section 02: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route,Species	LC/50 Route,Species
ALIPHATIC SOLVENT	**	N.AV.	**	N.AV.	N.AV.
ORGANIC SULPHOSUCCINATE	**	N.AV.	**	N.AV.	N.AV.
AMINO AROMATIC SULPHONATE	**	N.AV.	**	N.AV.	N.AV.
GLYCOL ETHER	**	N.AV.	**	N.AV.	N.AV.

* ** THE CHEMICAL IDENTITIES REPRESENT CONFIDENTIAL BUSINESS INFORMATION (CBI), AND WERE GRANTED REGISTRY NUMBER 7329 BY THE HMIRC ON OCTOBER 12 2010

Section 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
SKIN CONTACT..... IRRITANT. FREQUENT OR PROLONGED CONTACT MAY IRRITATE THE SKIN.. LOW TOXICITY. BRIEF CONTACT WITH THE LIQUID WILL NOT RESULT IN SIGNIFICANT IRRITATION UNLESS EVAPORATION IS PREVENTED.
SKIN ABSORPTION..... N.AV.
EYE CONTACT..... VAPOUR CAN BE IRRITATING, BUT WILL NOT INJURE EYE TISSUE. LIQUID CAN CAUSE SEVERE IRRITATION, REDDENING, SWELLING AND CORNEAL BURNS.
INHALATION..... HIGH VAPOUR/AEROSOL CONCENTRATIONS (GREATER THAN APPROXIMATELY 1000 PPM) ARE IRRITATING TO THE EYES AND THE RESPIRATORY TRACT, AND MAY CAUSE HEADACHES, DIZZINESS, ANESTHESIA, DROWSINESS, UNCONCIOUSNESS, AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS, INCLUDING DEATH. NEGLIGIBLE HAZARD AT NORMAL TEMPERATURES (UP TO 38 DEG C).
INGESTION..... SMALL AMOUNTS OF LIQUID ASPIRED INTO THE RESPIRATORY SYSTEM DURING INGESTION OR FROM VOMITING MAY CAUSE ,MILD TO SEVERE PULMONARY INJURY AND POSSIBLY DEATH. ACUTE ORAL EXPOSURE MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS AND GASTROINTESTINAL DAMAGE.
EFFECTS OF ACUTE EXPOSURE..... REFER TO ROUTE OF ENTRY.
EFFECTS OF CHRONIC EXPOSURE..... REFER TO ROUTE OF ENTRY.
MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE..... PREEXISTING EYE, SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

Section 04: FIRST AID MEASURES

INSTRUCTIONS:..... EYE CONTACT:. FLUSH EYES WITH LARGE AMOUNTS OF RUNNING WATER FOR AT LEAST 15 MINUTES. HOLD EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYE AND LIDS WITH WATER. CONTACT PHYSICIAN IF IRRITATION PERSISTS. IN CASE OF SKIN CONTACT.. FLUSH WITH LARGE AMOUNTS OF WATER. USE SOAP IF AVAILABLE. REMOVE SEVERELY

PRODUCT: PARATENE® S-620

CODE: 241029

Section 04: FIRST AID MEASURES

INSTRUCTIONS:..... CONTAMINATED CLOTHING. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. IN CASE OF INGESTION, OBTAIN MEDICAL ATTENTION IMMEDIATELY. DO NOT INDUCE VOMITING. GUARD AGAINST ASPIRATION INTO LUNGS. KEEP AT REST. HAVE INDIVIDUAL TURN ON TO THEIR LEFT SIDE. DO NOT GIVE ANYTHING BY MOUTH TO A CONVULSING OR UNCONSCIOUS PERSON. IF VOMITING OCCURS KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. IF INHALED.. REMOVE VICTIM FROM FURTHER EXPOSURE AND RESTORE BREATHING, IF REQUIRED. ADMINISTER ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. SEEK MEDICAL ATTENTION.

Section 05: FIRE FIGHTING MEASURES

FLAMMABILITY..... SEE FLASH POINT.
 IF YES, UNDER WHICH CONDITIONS?..... EXCESSIVE HEAT, SPARKS AND OPEN FLAME.
 EXTINGUISHING MEDIA..... CARBON DIOXIDE, DRY CHEMICAL, FOAM. WATER FOG.
 SPECIAL PROCEDURES..... DO NOT ENTER CONFINED FIRE SPACE WITHOUT ADEQUATE PROTECTIVE CLOTHING AND AN APPROVED POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS. EXCLUDE AIR. DO NOT USE WATER EXCEPT AS A FOG. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER. USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS AND STRUCTURES. AVOID SPRAYING WATER DIRECTLY INTO STORAGE CONTAINERS DUE TO DANGER OF BOILOVER.

FLASH POINT (C), METHOD..... >63 (TCC).
 AUTO IGNITION TEMPERATURE..... 227 C.
 UPPER FLAMMABLE LIMIT (% BY VOL.).... 10.5.
 LOWER FLAMMABLE LIMIT (% BY VOL.)... 1.
 EXPLOSION DATA..... N.AV.
 EXPLOSIVE POWER..... N.AV.
 RATE OF BURNING..... N.AV.
 SENSITIVITY TO STATIC DISCHARGE..... YES.
 SENSITIVITY TO IMPACT..... N.AV.
 HAZARDOUS COMBUSTION PRODUCTS.. FUMES, SMOKE AND CARBON MONOXIDE. OXIDES OF SULFUR. FUMES, SMOKE AND CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF SULFUR, OXIDES OF NITROGEN.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... ELIMINATE ALL SOURCES OF IGNITION. ISOLATE HAZARD AREA AND RESTRICT ACCESS. PREVENT ADDITIONAL DISCHARGE OF MATERIAL IF POSSIBLE TO DO WITHOUT HAZARD. PREVENT SPILLS FROM ENTERING SEWERS, WATER COURSES OR LOW AREAS. CONTAIN SPILLED LIQUID WITH SAND OR EARTH. DO NOT USE COMBUSTIBLE MATERIAL SUCH AS SAWDUST. RECOVER BY PUMPING (USE AN EXPULSION PROOF MOTOR OR HAND PUMP), OR BY USING A SUITABLE ABSORBENT. GROUND ALL EQUIPMENT. AVOID DIRECT CONTACT WITH MATERIAL. WEAR APPROPRIATE BREATHING APPARATUS (IF APPLICABLE) AND PROTECTIVE CLOTHING. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE.

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND AVOID BREATHING VAPOURS. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. EQUIPMENT AVOID INGESTION. WEAR PROTECTIVE EQUIPMENT DURING HANDLING. KEEP AWAY FROM IGNITION SOURCES. HOT SURFACES MAY BE SUFFICIENT TO IGNITE LIQUID EVEN IN THE ABSENCE OF SPARKS OR FLAMES. VAPOURS MAY ACCUMULATE AND TRAVEL TO DISTANT IGNITION SOURCES AND FLASHBACK. USE ADEQUATE VENTILATION. EMPTY PRODUCT CONTAINERS MAY CONTAIN PRODUCT RESIDUE. FOLLOW LABEL WARNINGS EVEN AFTER CONTAINER IS EMPTIED. EXTINGUISH PILOT LIGHTS, CIGARETTES AND TURN OFF OTHER SOURCES OF IGNITION PRIOR TO USE AND UNTIL ALL VAPOURS ARE GONE. NEVER USE PRESSURE TO EMPTY DRUMS - CONTAINER IS NOT A PRESSURE VESSEL. GROUND ALL EQUIPMENT. AIR-DRY CONTAMINATED CLOTHING IN A WELL VENTILATED AREA BEFORE LAUNDERING. WASH CONTAMINATED CLOTHING BEFORE RE-USE. MAINTAIN A GOOD PERSONAL HYGIENE.

STORAGE NEEDS..... STORE IN A COOL, DRY, WELL VENTILATED AREA, AWAY FROM HEAT AND IGNITION SOURCES. KEEP CONTAINER CLOSED WHEN NOT IN USE.

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

GLOVES/ TYPE..... WEAR IMPERVIOUS GLOVES. CONTACT GLOVE MANUFACTURER FOR SPECIFIC INFORMATION.

PRODUCT: PARATENE® S-620

CODE: 241029

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY/TYPE..... IF EXPOSURE EXCEEDS OCCUPATIONAL EXPOSURE LIMITS, WEAR A NIOSH-APPROVED RESPIRATOR. USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPOURS. PROPER EQUIPMENT FOR HIGH CONCENTRATIONS INCLUDES AN ATMOSPHERE SUPPLIED, POSITIVE PRESSURE DEMAND, SELF CONTAINED OR AIR-SUPPLIED BREATHING APPARATUS.

EYE/TYPE..... CHEMICAL SAFETY GOGGLES. FACE SHIELD.

FOOTWEAR/TYPE..... CHEMICAL RESISTANT BOOTS.

CLOTHING/TYPE..... WEAR IMPERVIOUS PROTECTIVE CLOTHING.

OTHER/TYPE..... EYE BATH AND SAFETY SHOWER.

ENGINEERING CONTROLS..... CONTROL AIRBORNE CONCENTRATIONS BELOW THE EXPOSURE GUIDELINE. GENERAL: HIGHLY RECOMMENDED FOR ALL INDOOR SITUATIONS TO CONTROL FUGITIVE EMISSIONS. ELECTRICAL AND MECHANICAL EQUIPMENT SHOULD BE EXPLOSION-PROOF. LOCAL: ALSO RECOMMENDED WHERE MECHANICAL VENTILATION IS INEFFECTIVE IN CONTROLLING AIRBORNE CONCENTRATIONS BELOW THE RECOMMENDED OCCUPATIONAL EXPOSURE LIMIT. MAKE-UP AIR SHOULD ALWAYS BE SUPPLIED TO BALANCE AIR EXHAUSTED (EITHER GENERALLY OR LOCALLY).

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... LIQUID.

ODOUR..... CHARACTERISTIC.

ODOUR THRESHOLD..... N.AV.

VAPOUR PRESSURE (MMHG)..... <0.1 KPA AT 20 C.

VAPOUR DENSITY (AIR=1)..... 5.5.

EVAPORATION RATE..... <1.0 (ASTM D 3539).

BOILING POINT..... 184-212 C (INITIAL).

MELTING/FREEZING POINT..... - 40 C.

PH..... N.AV.

SPECIFIC GRAVITY (WATER=1)..... 0.84 (15.5 C).

VISCOSITY..... ~2 CST (25 C).

SOLUBILITY IN WATER (% W/W)..... 25% (20 C).

VOLATILE..... 90 %.

COEFFICIENT OF WATER/OIL DIST..... N.AP.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:
YES..... YES.

NO, WHICH CONDITIONS?
COMPATABILITY WITH OTHER
SUBSTANCES:
YES
NO, WHICH ONES?..... STRONG ACIDS. STRONG OXIDIZERS. CONTAINS COMPONENT WHICH REACTS WITH ALUMINUM AT HIGH TEMPERATURES.

REACTIVITY CONDITIONS?..... AVOID EXCESSIVE HEAT, OPEN FLAMES AND ALL IGNITION SOURCES.

HAZARDOUS PRODUCTS OF
DECOMPOSITION..... OXIDES OF CARBON (CO,CO2).

HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL..... N.AV.

LC 50 OF MATERIAL, SPECIES & ROUTE.. NOT DETERMINED. GLYCOL ETHER: >600 MG/KG 4 HR (RAT).

LD 50 OF MATERIAL, SPECIES & ROUTE.. ALIPHATIC SOLVENT (ORAL-RAT): N.AV.; ORGANIC SULFOSUCCINATE (ORAL-RAT): >500 MG/KG; AMINO AROMATIC SULFONATE (ORAL-RAT): >500 MG/KG; GLYCOL ETHER (ORAL-RAT): >500 MG/KG, (DERMAL-RABBIT): >2000 MG/KG

CARCINOGENICITY OF MATERIAL..... NONE.

REPRODUCTIVE EFFECTS..... NONE.

IRRITANCY OF MATERIAL..... SEE SECTION 03.

SENSITIZING CAPABILITY OF MATERIAL..... NONE.

SYNERGISTIC MATERIALS..... NONE.

Section 12: ECOLOGICAL CONSIDERATIONS

ENVIRONMENTAL TOXICITY DO NOT ALLOW PRODUCT OR RUNOFF FROM FIRE CONTROL TO ENTER STORM INFORMATION OR SANITARY SEWERS, LAKES, RIVERS, STREAMS, OR PUBLIC WATERWAYS. BLOCK OFF DRAINS AND DITCHES. PROVINCIAL REGULATIONS REQUIRE AND

PRODUCT: PARATENE® S-620

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Section 12: ECOLOGICAL CONSIDERATIONS

ENVIRONMENTAL TOXICITY INFORMATION FEDERAL REGULATIONS MAY REQUIRE THAT ENVIRONMENTAL AND/OR OTHER AGENCIES BE NOTIFIED OF A SPILL INCIDENT. SPILL AREA MUST BE CLEANED AND RESTORED TO ORIGINAL CONDITION OR TO THE SATISFACTION OF AUTHORITIES. MAY BE HARMFUL TO AQUATIC LIFE.

Section 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, PROVINCIAL, AND LOCAL ENVIRONMENTAL REGULATIONS.

Section 14: TRANSPORT INFORMATION

TDG CLASSIFICATION..... NOT REGULATED.
SPECIAL SHIPPING INSTRUCTIONS..... N.AP.

Section 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION..... B3, D2B.
CPR COMPLIANCE..... THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

Section 16: OTHER INFORMATION

N.AV.=NOT AVAILABLE
N.AP.=NOT APPLICABLE
DSL..... LISTED.