

**Brake Cleaner Material Safety Data Sheet - MSDS**

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RENEGADE BRAKE CLEANER

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SECTION II-HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

1 PETROLEUM SOLVENT 85 - 90
2 ALCOHOL 10 - 15
NONE OF THE COMPONENTS OF THIS PRODUCT ARE RECOGNIZED AS
CARCINOGENIC.

SECTION III-PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT : 149 (DEGREES F)
evaporation rate: < 1 (ether = 1) % solid : not applicable
VAPOR DENSITY : > 1 (AIR = 1) WEIGHT PER GALLON : 5.74 (THEORETICAL)
PH LEVEL : SJB
(Boiling point represents boiling point of lowest boiling raw material.)

SECTION III-HEALTH HAZARD DATA

- EYE CONTACT -
BASED ON THE PRESENCE OF COMPONENTS 1 AND 2 PRODUCT IS PRESUMED
TO BE MODERATELY IRRITATING TO THE EYES. BASED ON THE PRESENCE OF
COMPONENTS 1 AND 2 PRODUCT VAPORS AND/OR MISTS MAY ALSO BE
IRRITATING TO THE EYES.

- SKIN CONTACT -
BASED ON THE PRESENCE OF COMPONENT 1 PRODUCT IS PRESUMED TO BE
MODERATELY IRRITATING TO THE SKIN. PROLONGED CONTACT MAY CAUSE
DAMAGE TO THE SKIN. BASED ON THE PRESENCE OF COMPONENTS 1 AND 2
PROLONGED OR REPEATED CONTACT MAY RESULT IN DEFATTING AND DRYING
OF THE SKIN WHICH MAY RESULT IN DERMATITIS.

- INHALATION -
EXPOSURE MAY PRODUCE IRRITATION TO THE NOSE, THROAT, RESPIRATORY
TRACT, AND OTHER MUCOUS MEMBRANES. BASED ON THE PRESENCE OF
COMPONENTS 1 AND 2 EXPOSURE TO HIGH CONCENTRATIONS OF VAPOR MAY
PRODUCE CENTRAL NERVOUS SYSTEM DEPRESSION. BASED ON THE PRESENCE
OF COMPONENT 1 REPEATED OVEREXPOSURE MAY DAMAGE THE PERIPHERAL
NERVOUS SYSTEM.

- INGESTION -

BASED ON THE PRESENCE OF COMPONENTS 1 AND 2 PRODUCT IS PRESUMED TO BE SLIGHTLY TOXIC. BASED ON THE PRESENCE OF COMPONENT 2 INGESTION MAY CAUSE KIDNEY DAMAGE. BASED ON THE PRESENCE OF COMPONENT 2 INGESTION MAY CAUSE LIVER DAMAGE. BASED ON THE PRESENCE OF COMPONENTS 1 AND 2 SMALL AMOUNTS OF THE LIQUID ASPIRATED INTO THE LUNGS DURING INGESTION OR FROM VOMITING MAY RESULT IN SEVERE LUNG DAMAGE. BASED ON THE PRESENCE OF COMPONENTS 1 AND 2 INGESTION MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.

- SIGNS AND SYMPTOMS -

SYMPTOMS OF EYE IRRITATION INCLUDE PAIN, TEARING, REDDENING AND SWELLING. SYMPTOMS OF SKIN IRRITATION INCLUDE REDDENING, SWELLING, RASH AND REDNESS. SYMPTOMS OF RESPIRATORY IRRITATION INCLUDE RUNNY NOSE, SORE THROAT, COUGHING, CHEST DISCOMFORT, SHORTNESS OF BREATH AND REDUCED LUNG FUNCTION. SYMPTOMS OF GASTROINTESTINAL IRRITATION INCLUDE SORE THROAT, ABDOMINAL PAIN, NAUSEA, VOMITING AND DIARRHEA. BASED ON THE PRESENCE OF COMPONENTS 1 AND 2 CENTRAL NERVOUS SYSTEM DEPRESSION MAY BE EVIDENCED BY HEADACHE, DIZZINESS, NAUSEA AND SYMPTOMS OF INTOXICATION; IN EXTREME CASES, UNCONSCIOUSNESS AND DEATH MAY OCCUR. SYMPTOMS OF CHRONIC OVEREXPOSURE INCLUDE LOSS OF MEMORY, LOSS OF INTELLECTUAL ABILITY AND LOSS OF COORDINATION.

- AGGRAVATED MEDICAL CONDITIONS -

PREEXISTING SKIN, EYE AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. IMPAIRED CENTRAL NERVOUS SYSTEM FUNCTIONS FROM PREEXISTING DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

- OTHER HEALTH EFFECTS -

BASED ON THE PRESENCE OF COMPONENT 2 PRODUCT IS PRESUMED TO BE FETOTOXIC. BASED ON THE PRESENCE OF COMPONENT 2 PRODUCT IS PRESUMED TO BE MUTAGENIC. BASED ON THE PRESENCE OF COMPONENT 1 CHRONIC OVEREXPOSURE MAY CAUSE DAMAGE TO THE RED BLOOD CELLS. BASED ON THE PRESENCE OF COMPONENT 1 REPEATED EXCESSIVE INGESTION MAY CAUSE CENTRAL NERVOUS EFFECTS.

SECTION V-EMERGENCY AND FIRST AID PROCEDURES**- EYE CONTACT -**

IMMEDIATELY FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION IF ANY SYMPTOMS PERSIST.

- SKIN CONTACT -

REMOVE CONTAMINATED CLOTHING AND SHOES. WIPE EXCESS FROM SKIN AND FLUSH WITH WATER USING SOAP IF AVAILABLE. SEEK MEDICAL ATTENTION IF IRRITATION OCCURS. DO NOT REUSE CLOTHING UNTIL THOROUGHLY DECONTAMINATED.

- INHALATION -

REMOVE VICTIM TO FRESH AIR AND TREAT SYMPTOMATICALLY. PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF THE VICTIM IS NOT BREATHING. SEEK PROMPT MEDICAL ATTENTION.

- INGESTION -

DO NOT INDUCE VOMITING. IF VOMITING SPONTANEOUSLY OCCURS, KEEP THE VICTIM'S HEAD BELOW THE HIPS TO PREVENT ASPIRATION INTO THE LUNGS. SINCE ASPIRATION INTO THE LUNGS CAN CAUSE VERY SERIOUS, PERMANENT

DAMAGE, THE DECISION OF WHETHER TO INDUCE VOMITING OR NOT SHOULD BE MADE BY A PHYSICIAN. DANGER FROM LUNG ASPIRATION MUST BE WEIGHED AGAINST TOXICITY WHEN CONSIDERING EMPTYING THE STOMACH. CONSULT A PHYSICIAN, HOSPITAL OR POISON CONTROL CENTER AND/OR TRANSPORT TO AN EMERGENCY FACILITY IMMEDIATELY.

- NOTES FOR PHYSICIAN -

THE FOLLOWING COMPONENT-SPECIFIC INFORMATION MAY CONTAIN CONTRADICTIONS, AND IS INTENTIONALLY INCLUDED TO GIVE THE ATTENDING PHYSICIAN SPECIFIC INFORMATION ABOUT THE INDIVIDUAL COMPONENTS OF THE BLEND. >> COMPONENTS 1 AND 2 MAY CAUSE SEVERE, PERMANENT DAMAGE IF ASPIRATED AND VOMITING SHOULD NOT BE INDUCED.

SECTION VI- FIRE AND EXPLOSION HAZARDS

FLASH POINT : -25 DEGREES F. TCC

- EXTINGUISHING MEDIA -

USE WATER FOG, FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

- SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS -

WARNING. EXTREMELY FLAMMABLE. CLEAR FIRE AREA OF UNPROTECTED PERSONNEL. DO NOT ENTER CONFINED FIRE SPACE WITHOUT HELMET, FACE SHIELD, BUNKER COAT, GLOVES, RUBBER BOOTS, AND A POSITIVE PRESSURE NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS.

- UNUSUAL FIRE AND EXPLOSION HAZARDS -

CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINERS THAT ARE EXPOSED TO DIRECT FLAME SHOULD BE COOLED WITH WATER TO ELIMINATE STRUCTURAL WEAKENING OF THE CONTAINER'S WALL AND POSSIBLE RUPTURE.

SECTION VII-REACTIVITY

STABILITY : STABLE HAZARDOUS POLYMERIZATION : WILL NOT OCCUR -
CONDITIONS AND MATERIALS TO AVOID -

- HAZARDOUS DECOMPOSITION PRODUCTS -

CARBON DIOXIDE, CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

SECTION VIII-EMPLOYEE PROTECTION

- RESPIRATORY PROTECTION -

USE VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS - AT LEAST 10 AIR CHANGES PER HOUR ARE RECOMMENDED FOR GOOD GENERAL ROOM VENTILATION. IF EXPOSURE EXCEEDS THE PEL/TLV, USE THE APPROPRIATE NIOSH-APPROVED RESPIRATOR.

- PROTECTIVE CLOTHING -

WEAR SAFETY GLASSES, GOGGLES, OR A SPLASH SHIELD TO PREVENT EYE CONTACT. CONTACT LENSES SHOULD NOT BE WORN. WEAR APPROPRIATE GLOVES AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND CLOTHING.

- ADDITIONAL PROTECTIVE MEASURES -

EYE WASH FOUNTAINS AND SAFETY SHOWERS SHOULD BE AVAILABLE FOR USE IN AN EMERGENCY.

SECTION IX- ENVIRONMENTAL PROTECTION**- SPILL OR LEAK PROCEDURES -**

LARGE SPILLS >> EVACUATE THE HAZARD AREA OF UNPROTECTED PERSONNEL. WEAR APPROPRIATE RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF SOURCE OF LEAK ONLY IF SAFE TO DO SO. DIKE AND CONTAIN. IF VAPOR CLOUD FORMS, WATER FOG MAY BE USED TO SUPPRESS; CONTAIN RUN-OFF. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND OR OTHER SUITABLE MATERIAL; PLACE IN NON-LEAKING CONTAINERS FOR PROPER DISPOSAL. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE; DISPOSE OF FLUSH SOLUTIONS AS ABOVE. SMALL SPILLS >> TAKE UP WITH AN ABSORBENT MATERIAL AND PLACE IN NON-LEAKING CONTAINERS; SEAL TIGHTLY FOR PROPER DISPOSAL.

- WASTE DISPOSAL -

OBSERVE ALL FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING PROPER DISPOSAL.

SECTION X-ADDITIONAL PRECAUTIONS

KEEP LIQUID AND VAPOR AWAY FROM HEAT, SPARKS, AND FLAME. EXTINGUISH PILOT LIGHTS, CIGARETTES AND TURN OFF OTHER POSSIBLE SOURCES OF IGNITION PRIOR TO USE AND UNTIL VAPORS ARE GONE. SURFACES THAT ARE SUFFICIENTLY HOT MAY IGNITE PRODUCT IN THE ABSENCE OF SPARKS OR FLAME. VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM HANDLING SITE. KEEP CONTAINERS CLOSED WHEN NOT IN USE. USE WITH ADEQUATE VENTILATION. CONTAINERS, EVEN IF EMPTY, CAN CONTAIN EXPLOSIVE VAPORS OR RESIDUES. DO NOT CUT, DRILL, GRIND, OR WELD NEAR CONTAINERS AFTER CONTACT WITH PRODUCT OR CONTAINER WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES.

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