ASHLAND CHEMICAL, INC. P.O. BOX 2219 COLUMBUS, OHIO 43216

24-HOUR Emergency Telephone 1(800) 274-5263 or 1(800) ASHLAND

#88059

ACETONE

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005438

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STANDARD)

Product Name: ACETONE CAS NUMBER: 67-64-1

SHULTZ DISTRIBUTING INC. P.O. BOX 24845

05 50 108 8134590-

Data Sheet No: 0004335-006.003 Prepared: 09/30/94 Supersedes: 07/29/94 Supersedes: Print Date: 01/14/95

PRODUCT: 3010000
INVOICE: 090312
INVOICE DATE: 01/10/95
TO: SHULTZ DISTRIBUTING INC
1733 ALASKA WAY SOUTH
GATX TERMINAL
SEATTLE WA

WA 98124

FAX: 206-682-3814 SEATTLE

WA 98124

ATTN: PLANT MGR./SAFETY DIR.

SECTION I-PRODUCT IDENTIFICATION

General or Generic ID: KETONE

SECTION 11-COMPONENTS

IF PRESENT. LARC. NTP AND OSHA CARCINOGENS AND CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III SECTION 313 ARE IDENTIFIED IN THIS SECTION.

SEE DEFINITION PAGE FOR CLARIFICATION

INGREDIENT

Percent

PEL

TLV

Note

ACETONE CAS #: 67-64-1 750 PPM

750 PPM

(1)

Notes:

(1) OSHA/ACGIH SHORT TERM EXPOSURE LIMIT (STEL) FOR ACETONE IS 1000 PPM. NIOSH RECOMMENDS A LIMIT OF 250 PPM, 8-HOUR TWA.

THIS CHEMICAL IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III.

	SECTION III-PHYSICAL	LUAIA
Boiling Point	for PRODUCT	133.00 Deg F (56.11 Deg C) @ 760.00 mm Hg
Vapor Pressure	for PRODUCT	181.70 mm Hg @ 68.00 Deg F (20.00 Deg C)
Specific Vapor Density	AIR = 1	2.00
Specific Gravity		.785788 @ 77.00 Deg F (25.00 Deg C)
Percent Volatiles		100.00%
Evaporation Rate	(N-BUTYL ACETATE = 1)	14,40

SECTION IV-FIRE AND EXPLOSION INFORMATION

FLASH POINT(TCC)

-1.0 Deg F

-18.3 Deg C)

EXPLOSIVE LIMIT

(PRODUCT)

LOWER -2.6%

UPPER - 12.8%

EXTINGUISHING MEDIA: ALCOHOL FOAM OR CARBON DIOXIDE OR DRY CHEMICAL

HAZARDOUS DECOMPOSITION PRODUCTS: MAY FORM TOXIC MATERIALS: CARBON DIOXIDE AND CARBON MONOXIDE, ETC.

FIREFIGHTING PROCEDURES: WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES.

WATER MAY NOT BE EFFECTIVE FOR FIGHTING FIRES

WATER MAY BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL UNTIL FIRE IS OUT.

SPECIAL FIRE & EXPLOSION HAZARDS: NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

ALL FIVE GALLON PAILS AND LARGER METAL CONTAINERS INCLUDING TANK CARS AND TANK TRUCKS SHOULD BE GROUNDED AND/OR BONDED WHEN MATERIAL IS TRANSFERRED.

MATERIAL IS HIGHLY VOLATILE AND READILY GIVES OFF VAPORS WHICH MAY TRAVEL ALONG THE GROUND OR BE MOVED BY VENTILATION AND IGNITED BY PILOT LIGHTS, OTHER FLAMES. SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS, STATIC DISCHARGE, OR OTHER IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT.

NFPA CODES:

HEALTH- 1

FLAMMABILITY- 3

REACTIVITY- 0

SECTION V-HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL

750

THRESHOLD LIMIT VALUE

750 PPM

EFFECTS OF ACUTE OVEREXPOSURE:

EYES - EXPOSURE CAUSES EYE IRRITATION. SYMPTOMS MAY INCLUDE STINGING, TEARING, REDNESS, AND SWELLING.

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MATERIAL SAFETY DATA SHEET



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SECTION V-HEALTH HAZARD DATA (

SKIN - EXPOSURE MAY CAUSE MILD SKIN IRRITATION. PROLONGED OR REPEATED EXPOSURE MAY DRY THE SKIN. SYMPTOMS MAY INCLUDE REDNESS. BURNING. DRYING AND CRACKING, AND SKIN BURNS. PRE-EXISTING SKIN DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

SKIN ABSORPTION IS POSSIBLE, BUT HARMFUL EFFECTS ARE NOT EXPECTED FROM THIS ROUTE OF EXPOSURE UNDER NORMAL CONDITIONS OF HANDLING AND USE.

BREATHING - EXPOSURE TO VAPOR OR MIST IS POSSIBLE.
SHORT-TERM INHALATION TOXICITY IS LOW. BREATHING SMALL AMOUNTS DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS; BREATHING LARGE AMOUNTS MAY BE HARMFUL.

SYMPTOMS ARE MORE TYPICALLY SEEN AT AIR CONCENTRATIONS EXCEEDING THE RECOMMENDED EXPOSURE LIMITS. SYMPTOMS OF EXPOSURE MAY INCLUDE:
-IRRITATION (NOSE, THROAT, RESPIRATORY TRACT) - PRE-EXISTING LUNG DISORDERS. E.G. ASTHMA-LIKE CONDITIONS, MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

-COUGH-

-COUGH-CENTRAL NERVOUS SYSTEM (CNS) DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS) AND OTHER CNS EFFECTS-

UNCONSCIOUSNESS) AND OTHER CNS EFFECTS—
-COMASWALLOWING - SINGLE DOSE ORAL TOXICITY IS LOW. SWALLOWING SMALL AMOUNTS DURING NORMAL HANDLING IS NOT LIKELY
TO CAUSE HARMFUL EFFECTS; SWALLOWING LARGE AMOUNTS MAY BE HARMFUL.
SYMPTOMS MAY INCLUDE:
-MOUTH AND THOAT IRRITATION—
-GASTROINTESTINAL IRRITATION (NAUSEA, VOMITING, DIARRHEA)—
-CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE,
UNCONSCIOUSNESS)—
-HIGH BLOOD SUGAR—
-COMA-

THIS MATERIAL CAN ENTER THE LUNGS DURING SWALLOWING OR VOMITING AND CAUSE LUNG INFLAMMATION AND/OR DAMAGE.

FIRST AID:

IF ON SKIN: REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREA WITH SOAP AND WATER. IF SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION. LAUNDER CLOTHING BEFORE REUSE.

IF IN EVES: IF SYMPTOMS DEVELOP, MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. FLUSH EVES GENTLY WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS APART. IF SYMPTOMS PERSIST OR THERE IS ANY VISUAL DIFFICULTY, SEEK MEDICAL ATTENTION.

IF SWALLOWED: DO NOT INDUCE VOMITING. THIS MATERIAL IS AN ASPIRATION HAZARD. IF INDIVIDUAL IS DROWSY OR UNCONSCIOUS, PLACE ON LEFT SIDE WITH THE HEAD DOWN. SEEK MEDICAL ATTENTION. IF POSSIBLE, DO NOT LEAVE INDIVIDUAL UNATTENDED.

IF BREATHED: IF SYMPTOMS DEVELOP. IMMEDIATELY MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. SEEK IMMEDIATE MEDICAL ATTENTION: KEEP PERSON WARM AND QUIET. IF PERSON IS NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN.

NOTE TO PHYSICIAN: THIS MATERIAL (OR A COMPONENT) HAS PRODUCED HYPERGLYCEMIA AND KETOSIS FOLLOWING SUBSTANTIAL INGESTION.

PRIMARY ROUTE(S) OF ENTRY:

INHALATION, SKIN ABSORPTION, SKIN CONTACT, EYE CONTACT

EFFECTS OF CHRONIC OVEREXPOSURE:

THIS MATERIAL (OR A COMPONENT) SHORTENS THE TIME OF ONSET OR WORSENS THE LIVER AND KIDNEY DAMAGE INDUCED BY OTHER CHEMICALS.

THIS MATERIAL (OR A COMPONENT) HAS BEEN SHOWN TO CAUSE HARM TO THE FETUS IN LABORATORY ANIMAL STUDIES. HARM TO THE FETUS OCCURS ONLY AT EXPOSURE LEVELS THAT HARM THE PREGNANT ANIMAL. THE RELEVANCE OF THESE FINDINGS TO HUMANS IS UNCERTAIN.

OVEREXPOSURE TO THIS MATERIAL (OR ITS COMPONENTS) HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN LABORATORY ANIMALS. AND MAY AGGRAVATE PRE-EXISTING DISORDERS OF THESE ORGANS IN HUMANS:, MILD. REVERSIBLE LIVER EFFECTS, MILD, REVERSIBLE KIDNEY EFFECTS

SECTION VI-REACTIVITY DATA

HAZARDOUS POLYMERIZATION: CANNOT OCCUR

STABILITY: STABLE

INCOMPATIBILITY: AVOID CONTACT WITH:, STRONG OXIDIZING AGENTS, ACIDS

SECTION VII-SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

SMALL SPILL: ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT OR OTHER ABSORBENT MATERIAL.

LARGE SPILL: ELIMINATE ALL IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, ELECTRICAL SPARKS). PERSONS
NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED.
STOP SPILL AT SOURCE. PREVENT FROM ENTERING DRAINS, SEWERS, STREAMS OR OTHER BODIES OF WATER PREVENT FROM
SPREADING. IF RUNOFF OCCURS, NOTIFY AUTHORITIES AS REQUIRED. PUMP OR VACUUM TRANSFER SPILLED PRODUCT TO
CLEAN CONTAINERS FOR RECOVERY. ABSORB UNRECOVERABLE PRODUCT.TRANSFER CONTAMINATED ABSORBENT, SOIL AND
OTHER MATERIALS TO CONTAINERS FOR DISPOSAL.

PREVENT RUN-OFF TO SEWERS, STREAMS OR OTHER BODIES OF WATER. IF RUN-OFF OCCURS, NOTIFY PROPER AUTHORITIES AS REQUIRED, THAT A SPILL HAS OCCURED.

WASTE DISPOSAL METHOD:

SMALL SPILL: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

LARGE SPILL: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

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DATA SHEET



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SECTION VILL-PROTECTIVE EQUIPMENT TO BE

RESPIRATORY PROTECTION: IF WORKPLACE EXPOSURE LIMIT(S) OF PRODUCT OR ANY COMPONENT IS EXCEEDED (SEE SECTION II), A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED CONDITIONS (SEE YOUR INDUSTRIAL HYGIENIST). ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

VENTILATION: PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

PROTECTIVE GLOVES: WEAR RESISTANT GLOVES (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER).

EYE PROTECTION: CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED: HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. CONSULT YOUR SAFETY REPRESENTATIVE.

OTHER PROTECTIVE EQUIPMENT: TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

SECTION IX-SPECIAL PRECAUTIONS OR OTHER COMMENTS

CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THIS DATASHEET MUST BE OBSERVED.

WARNING!!! SUDDEN RELEASE OF MOT ORGANIC CHEMICAL VAPORS OR MISTS FROM PROCESS EQUIPMENT OPERATING AT ELEVATED TEMPERATURE AND PRESSURE, OR SUDDEN INCRESS OF AIR INTO VACUUM EQUIPMENT, MAY RESULT IN IGNITIONS WITHOUT THE PRESENCE OF OBVIOUS IGNITION SOURCES. PUBLISHED "AUTOIGNITION" OR "IGNITION" TEMPERATURE VALUES CANNOT BE TREATED AS SAFE OPERATING TEMPERATURES IN CHEMICAL PROCESSES WITHOUT ANALYSIS OF THE ACTUAL PROCESS CONDITIONS. ANY USE OF THIS PRODUCT IN ELEVATED TEMPERATURE PROCESSES SHOULD BE THOROUGHLY EVALUATED TO ESTABLISH AND MAINTAIN SAFE OPERATING CONDITIONS.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.