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S A F E T Y D A T A S H E E T

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:	21847
NAME:	SALICYLALDEHYDE
SYNONYMS:	(2-HYDROXYPHENYL) METHANAL
24 HOUR EMERGENCY TELEPHONE:	(800) 535-5053(USA)
	352-323-3500 (INTERNATIONAL)
TO REQUEST AN MSDS:	(800) 869-9290
CUSTOMER SERVICE:	(630) 766-2112

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)
FLAMMABLE LIQUIDS (CATEGORY 4), H227
ACUTE TOXICITY (ORAL) (CATEGORY 4), H302
SKIN IRRITATION (CATEGORY 2), H315
EYE IRRITATION (CATEGORY 2A), H319
GERM CELL MUTAGENICITY (CATEGORY 2), H341
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (CATEGORY 2 (NERVOUS SYSTEM, KIDNEY, LIVER, SKIN)), H373

SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 2), H401
LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 2), H411

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM

SIGNAL WORD WARNING

HAZARD STATEMENT(S)

H227	COMBUSTIBLE LIQUID.
H302	HARMFUL IF SWALLOWED.
H315	CAUSES SKIN IRRITATION.
H319	CAUSES SERIOUS EYE IRRITATION.
H341	SUSPECTED OF CAUSING GENETIC DEFECTS.
H373	MAY CAUSE DAMAGE TO ORGANS (NERVOUS SYSTEM, KIDNEY, LIVER, SKIN) THROUGH PROLONGED OR REPEATED EXPOSURE.
H411	TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

PRECAUTIONARY STATEMENT(S)

P201	OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
P202	DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.
P210	KEEP AWAY FROM HEAT/ SPARKS/ OPEN FLAMES/ HOT SURFACES. NO SMOKING.
P260	DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/ SPRAY.
P264	WASH SKIN THOROUGHLY AFTER HANDLING.
P270	DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
P273	AVOID RELEASE TO THE ENVIRONMENT.
P280	WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION.
P301 + P312 + P330	IF SWALLOWED: CALL A POISON CENTER/DOCTOR IF YOU FEEL UNWELL. RINSE MOUTH.
P302 + P352	IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
P305 + P351 + P338	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.
P308 + P313	IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ ATTENTION.
P332 + P313	IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/ ATTENTION.
P337 + P313	IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ ATTENTION.
P362	TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE REUSE.
P370 + P378	IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR ALCOHOL-RESISTANT FOAM TO EXTINGUISH.

P391	COLLECT SPILLAGE.
P403 + P235	STORE IN A WELL-VENTILATED PLACE. KEEP COOL.
P405	STORE LOCKED UP.
P501	DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS NONE

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: $C_7H_6O_2$

MW: 122.12

CAS-NO. 90-02-8

PURITY: ≥ 99% (GC)

HAZARDOUS COMPONENTS

COMPONENT	CAS NO./UNIQUE ID	CONCENTRATION
SALICYLALDEHYDE	90-02-8	>= 90 - <= 100
PHENOL	108-95-2	>= 1 - < 3

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.

IF INHALED AFTER INHALATION: FRESH AIR. CALL IN PHYSICIAN.

IN CASE OF SKIN CONTACT AFTER CONTACT WITH SKIN: RINSE OUT WITH POLYETHYLENE GLYCOL 400 OR A MIXTURE OF POLYETHYLENE GLYCOL 300/ETHANOL 2:1 AND WASH WITH PLENTY OF WATER. IF NEITHER IS AVAILABLE WASH WITH PLENTY OF WATER. IMMEDIATELY TAKE OFF CONTAMINATED CLOTHING. CONSULT A PHYSICIAN.

IN CASE OF EYE AFTER EYE CONTACT: RINSE OUT WITH PLENTY OF

CONTACT	WATER. CALL IN OPHTHALMOLOGIST. REMOVE CONTACT LENSES.
IF SWALLOWED	AFTER SWALLOWING: IMMEDIATELY MAKE VICTIM DRINK WATER (TWO GLASSES AT MOST). CONSULT A PHYSICIAN.
PROTECTION OF FIRST-AIDERS	FOR PERSONAL PROTECTION SEE SECTION 8.
NOTES TO PHYSICIAN	NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA	USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE.
SPECIFIC HAZARDS DURING FIRE FIGHTING	COMBUSTIBLE. VAPOURS ARE HEAVIER THAN AIR AND MAY SPREAD ALONG FLOORS. FORMS EXPLOSIVE MIXTURES WITH AIR ON INTENSE HEATING. DEVELOPMENT OF HAZARDOUS COMBUSTION GASES OR VAPOURS POSSIBLE IN THE EVENT OF FIRE.
HAZARDOUS COMBUSTION PRODUCTS	CARBON OXIDES
SPECIFIC EXTINGUISHING METHODS	NO DATA AVAILABLE
FURTHER INFORMATION	REMOVE CONTAINER FROM DANGER ZONE AND COOL WITH WATER. PREVENT FIRE EXTINGUISHING WATER FROM CONTAMINATING SURFACE WATER OR THE GROUND WATER SYSTEM.
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS	STAY IN DANGER AREA ONLY WITH SELF-CONTAINED BREATHING APPARATUS. PREVENT SKIN CONTACT BY KEEPING A SAFE DISTANCE OR BY WEARING SUITABLE PROTECTIVE CLOTHING.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	ADVICE FOR NON-EMERGENCY PERSONNEL: DO NOT BREATHE VAPOURS, AEROSOLS. AVOID SUBSTANCE CONTACT. ENSURE ADEQUATE VENTILATION. KEEP AWAY FROM HEAT AND SOURCES OF IGNITION. EVACUATE THE DANGER AREA, OBSERVE EMERGENCY PROCEDURES, CONSULT AN EXPERT. ADVICE FOR EMERGENCY RESPONDERS: FOR PERSONAL PROTECTION SEE SECTION 8.
ENVIRONMENTAL PRECAUTIONS	DO NOT LET PRODUCT ENTER DRAINS.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	COVER DRAINS. COLLECT, BIND, AND PUMP OFF SPILLS. OBSERVE POSSIBLE MATERIAL RESTRICTIONS (SEE SECTIONS 7 AND 10). TAKE UP WITH LIQUID-ABSORBENT MATERIAL (E.G. CHEMIZORB®). DISPOSE OF PROPERLY. CLEAN UP AFFECTED AREA.
REFERENCE TO OTHER SECTIONS	FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	KEEP AWAY FROM OPEN FLAMES, HOT SURFACES AND SOURCES OF IGNITION. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. TIGHTLY CLOSED. 10, COMBUSTIBLE LIQUIDS
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. KEEP IN A DRY PLACE. STORE AT 0 - 8 °C
FURTHER INFORMATION ON STORAGE STABILITY	LIGHT SENSITIVE. STORE UNDER INERT GAS. AIR SENSITIVE.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

COMPONENT	CAS-NO.	VALUE	CONTROL PARAMETERS	BASIS
PHENOL	108-95-2	TWA	5 PPM	5 PPM
		TWA	5 PPM 19 MG/M3	NIOSH REL
		C	15.6 PPM 60 MG/M3	NIOSH REL
		TWA	5 PPM 19 MG/M3	OSHA Z-1

BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS

COMPONENTS	CAS-NO.	CONTROL PARAMETERS	BIOLOGICAL SPECIMEN	SAMPLING TIME	PERMISSIBL E CONCENTRATION	BASIS
PHENOL	108-95-2	PHENOL	URINE	END OF SHIFT (AS SOON AS POSSIBLE AFTER EXPOSURE CEASES)	250 MG/G CREATININE	ACGIH BEI

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU). SAFETY GLASSES

SKIN PROTECTION PROTECTIVE CLOTHING

BODY PROTECTION PROTECTIVE CLOTHING

RESPIRATORY PROTECTION	WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).
	HAND PROTECTION MATERIAL : BUTYL-RUBBER BREAK THROUGH TIME : 480 MIN GLOVE THICKNESS : 0.7 MM PROTECTIVE INDEX : FULL CONTACT MANUFACTURER : BUTOJECT® (KCL 898)
	MATERIAL : VITON® BREAK THROUGH TIME : 120 MIN GLOVE THICKNESS : 0.7 MM PROTECTIVE INDEX : SPLASH CONTACT MANUFACTURER : VITOJECT® (KCL 890, SIZE M)
	REMARKS : THIS RECOMMENDATION APPLIES ONLY TO THE PRODUCT STATED IN THE SAFETY DATA SHEET, SUPPLIED BY US AND FOR THE DESIGNATED USE. WHEN DISSOLVING IN OR MIXING WITH OTHER SUBSTANCES AND UNDER CONDITIONS DEVIATING FROM THOSE STATED IN EN 16523-1 PLEASE CONTACT THE SUPPLIER OF CE-APPROVED GLOVES (E.G. KCL GMBH).
HYGIENE MEASURES	IMMEDIATELY CHANGE CONTAMINATED CLOTHING. APPLY PREVENTIVE SKIN PROTECTION. WASH HANDS AND FACE AFTER WORKING WITH SUBSTANCE.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	COLORLESS TO PALE YELLOW LIQUID
ODOUR	BITTER ALMOND-LIKE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	6 - 8 (68 °F / 20 °C) (UNDILUTED)
MELTING POINT/FREEZING POINT	34 - 36 °F / 1 - 2 °C
INITIAL BOILING POINT AND BOILING RANGE	387 °F / 197 °C
FLASH POINT	171 °F / 77 °C METHOD: CLOSED CUP
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS)	NO DATA AVAILABLE

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	NO DATA AVAILABLE
VAPOUR PRESSURE	NO DATA AVAILABLE
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	1.166
WATER SOLUBILITY	4.9 G/L SOLUBLE (77 °F / 25 °C) METHOD: OECD TEST GUIDELINE 105
PARTITION COEFFICIENT: N-OCTANOL/WATER	LOG POW: 1.66 (77 °F / 25 °C) PH: 6.2 - 6.3 METHOD: OECD TEST GUIDELINE 107 GLP: YES BIOACCUMULATION IS NOT EXPECTED.
AUTO-IGNITION TEMPERATURE	NO DATA AVAILABLE
DECOMPOSITION TEMPERATURE	NO DATA AVAILABLE
VISCOSITY	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NOT CLASSIFIED AS EXPLOSIVE.
OXIDIZING PROPERTIES	NONE
OTHER SAFETY INFORMATION	NO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY	FORMS EXPLOSIVE MIXTURES WITH AIR ON INTENSE HEATING. A RANGE FROM APPROX. 15 KELVIN BELOW THE FLASH POINT IS TO BE RATED AS CRITICAL.
CHEMICAL STABILITY	THE PRODUCT IS CHEMICALLY STABLE UNDER STANDARD AMBIENT CONDITIONS (ROOM TEMPERATURE).
POSSIBILITY OF HAZARDOUS REACTIONS	VIOLENT REACTIONS POSSIBLE WITH: STRONG OXIDIZING AGENTS HALOGENS STRONG ACIDS AND STRONG BASES FLUORINE
CONDITIONS TO AVOID	HEAT, FLAMES AND SPARKS. STRONG HEATING.
INCOMPATIBLE MATERIALS	NO DATA AVAILABLE
HAZARDOUS DECOMPOSITION PRODUCTS	IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	ACUTE TOXICITY ESTIMATE ORAL - 476.21 MG/KG (CALCULATION METHOD) LD50 ORAL - RAT - FEMALE - 500 MG/KG (OECD TEST GUIDELINE 423) ACUTE TOXICITY ESTIMATE INHALATION - 4 H - 51 MG/L - DUST/MIST (CALCULATION METHOD) ACUTE TOXICITY ESTIMATE DERMAL - > 5,000 MG/KG (CALCULATION METHOD) DERMAL: NO DATA AVAILABLE
SKIN CORROSION/IRRITATION	SKIN – RABBIT RESULT: NO SKIN IRRITATION - 4 H (OECD TEST GUIDELINE 404)
SERIOUS EYE DAMAGE/EYE IRRITATION	NO DATA AVAILABLE
RESPIRATORY OR SKIN SENSITISATION	NO DATA AVAILABLE
GERM CELL MUTAGENICITY	TEST TYPE: AMES TEST TEST SYSTEM: ESCHERICHIA COLI/SALMONELLA TYPHIMURIUM METABOLIC ACTIVATION: WITH AND WITHOUT METABOLIC ACTIVATION METHOD: OECD TEST GUIDELINE 471 RESULT: NEGATIVE TEST TYPE: IN VIVO MICRONUCLEUS TEST SPECIES: RAT CELL TYPE: BONE MARROW APPLICATION ROUTE: ORAL METHOD: OECD TEST GUIDELINE 474 RESULT: NEGATIVE
CARCINOGENICITY 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.

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.
OSHA:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA'S LIST OF REGULATED CARCINOGENS.
REPRODUCTIVE TOXICITY	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL INFORMATION	REPEATED DOSE TOXICITY - RAT - MALE AND FEMALE - ORAL - NO OBSERVED ADVERSE EFFECT LEVEL - 10 MG/KG TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. STOMACH - IRREGULARITIES - BASED ON HUMAN EVIDENCE

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES	EC50 (DAPHNIA MAGNA (WATER FLEA)): 2.6 MG/L END POINT: IMMOBILIZATION EXPOSURE TIME: 48 H TEST TYPE: SEMI-STATIC TEST ANALYTICAL MONITORING: YES METHOD: OECD TEST GUIDELINE 202 GLP: YES
TOXICITY TO ALGAE/AQUATIC PLANTS	ERC50 (PSEUDOKIRCHNERIELLA SUBCAPITATA (GREEN ALGAE)): 4.8 MG/L EXPOSURE TIME: 72 H TEST TYPE: STATIC TEST ANALYTICAL MONITORING: YES METHOD: OECD TEST GUIDELINE 201 GLP: YES

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES (CHRONIC TOXICITY)	NOEC (DAPHNIA MAGNA (WATER FLEA)): 0.13 MG/L EXPOSURE TIME: 21 D METHOD: OECD TEST GUIDELINE 211 GLP: YES

ECOTOXICOLOGY ASSESSMENT

CHRONIC AQUATIC TOXICITY	TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

PHENOL:

TOXICITY TO FISH	LC50 (ONCHORHYNCHUS CLARKI): 8.9 MG/L EXPOSURE TIME: 96 H TEST TYPE: FLOW-THROUGH TEST ANALYTICAL MONITORING: YES METHOD: US-EPA
TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES	EC50 (CERIODAPHNIA DUBIA (WATER FLEA)): 3.1 MG/L END POINT: IMMOBILIZATION EXPOSURE TIME: 48 H TEST TYPE: STATIC TEST ANALYTICAL MONITORING: YES METHOD: US-EPA
TOXICITY TO ALGAE/AQUATIC PLANTS	EC50 (PSEUDOKIRCHNERIELLA SUBCAPITATA (ALGAE)): 61.1 MG/L EXPOSURE TIME: 96 H TEST TYPE: STATIC TEST METHOD: US-EPA
TOXICITY TO FISH (CHRONIC TOXICITY)	NOEC (FISH): 0.077 MG/L EXPOSURE TIME: 60 D TEST TYPE: SEMI-STATIC TEST REMARKS: (ECHA)
TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES (CHRONIC TOXICITY)	NOEC (DAPHNIA MAGNA (WATER FLEA)): 0.16 MG/L END POINT: GROWTH INHIBITION EXPOSURE TIME: 16 D TEST TYPE: SEMI-STATIC TEST REMARKS: (ECHA)
TOXICITY TO MICROORGANISMS	IC50 (MICROORGANISMS): 21 MG/L EXPOSURE TIME: 24 H TEST TYPE: STATIC TEST REMARKS: (ECHA)

PERSISTENCE AND DEGRADABILITY

SALICYLALDEHYDE:

BIODEGRADABILITY	AEROBIC INOCULUM: ACTIVATED SLUDGE, NON-ADAPTED CONCENTRATION: 100 MG/L BIOCHEMICAL OXYGEN DEMAND RESULT: NOT RAPIDLY BIODEGRADABLE BIODEGRADATION: 2 % EXPOSURE TIME: 28 D METHOD: OECD TEST GUIDELINE 301C GLP: YES

PHENOL:

BIODEGRADABILITY	AEROBIC INOCULUM: ACTIVATED SLUDGE CONCENTRATION: 100 MG/L RESULT: READILY BIODEGRADABLE. BIODEGRADATION: 62 % EXPOSURE TIME: 100 H METHOD: OECD TEST GUIDELINE 301C

BIOACCUMULATIVE POTENTIAL

SALICYLALDEHYDE

BIOACCUMULATION	REMARKS: DUE TO THE DISTRIBUTION COEFFICIENT NOCTANOL/WATER, ACCUMULATION IN ORGANISMS IS NOT EXPECTED.
PARTITION COEFFICIENT: NOCTANOL/WATER	LOG POW: 1.66 (77 °F / 25 °C) PH: 6.2 - 6.3 METHOD: OECD TEST GUIDELINE 107 GLP: YES REMARKS: BIOACCUMULATION IS NOT EXPECTED.

PHENOL

BIOACCUMULATION	SPECIES: DANIO RERIO (ZEBRA FISH) BIOCONCENTRATION FACTOR (BCF): 17.5 EXPOSURE TIME: 5 H TEMPERATURE: 77 °F / 25 °C CONCENTRATION: 2 MG/L METHOD: OECD TEST GUIDELINE 305 REMARKS: DOES NOT BIOACCUMULATE.
PARTITION COEFFICIENT: NOCTANOL/WATER	LOG POW: 1.47 (86 °F / 30 °C) PH: 3 – 8 REMARKS: (ECHA) BIOACCUMULATION IS NOT EXPECTED.

MOBILITY IN SOIL	NO DATA AVAILABLE

OTHER ADVERSE EFFECTS

PRODUCT:

OZONE-DEPLETION POTENTIAL	REGULATION: 40 CFR PROTECTION OF ENVIRONMENT; PART 82 PROTECTION OF STRATOSPHERIC OZONE - CAA SECTION 602 CLASS I SUBSTANCES REMARKS: THIS PRODUCT NEITHER CONTAINS, NOR WAS MANUFACTURED WITH A CLASS I OR CLASS II ODS AS DEFINED BY THE U.S. CLEAN AIR ACT SECTION 602 (40 CFR 82, SUBPT. A, APP.A + B).

COMPONENTS:

SALICYLALDEHYDE:

ADDITIONAL ECOLOGICAL INFORMATION	DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

PHENOL:

RESULTS OF PBT AND VPVB ASSESSMENT	SUBSTANCE DOES NOT MEET THE CRITERIA FOR PBT OR VPVB ACCORDING TO REGULATION (EC) NO 1907/2006, ANNEX XIII.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

WASTE FROM RESIDUES	WASTE MATERIAL MUST BE DISPOSED OF IN ACCORDANCE WITH THE NATIONAL AND LOCAL REGULATIONS. LEAVE CHEMICALS IN ORIGINAL CONTAINERS. NO MIXING WITH OTHER WASTE. HANDLE UNCLEANED CONTAINERS LIKE THE PRODUCT ITSELF.
CONTAMINATED PACKAGING	DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME	COMBUSTIBLE LIQUID, N.O.S. (SALICYLALDEHYDE)
UN NUMBER:	NA 1993
CLASS:	CBL
PACKING GROUP:	III
ERG CODE	128
MARINE POLLUTANT	NO
POISON INHALATION HAZARD	NO

IMDG

PROPER SHIPPING NAME	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SALICYLALDEHYDE)
UN NUMBER:	3082
CLASS:	9
PACKING GROUP:	III
EMS-NO:	F-A, S-F
MARINE POLLUTANT :	YES

IATA

PROPER SHIPPING NAME	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SALICYLALDEHYDE)
UN NUMBER:	3082
CLASS:	9
PACKING GROUP:	III

SPECIAL PRECAUTIONS FOR USER
REMARKS: EHS-MARK REQUIRED (ADR 2.2.9.1.10, IMDG CODE 2.10.3) FOR SINGLE PACKAGINGS AND COMBINATION PACKAGINGS CONTAINING INNER PACKAGINGS WITH DANGEROUS GOODS > 5L FOR LIQUIDS OR > 5KG FOR SOLIDS.

THE TRANSPORT CLASSIFICATION(S) PROVIDED HEREIN ARE FOR INFORMATIONAL PURPOSES ONLY, AND SOLELY BASED UPON THE PROPERTIES OF THE UNPACKAGED MATERIAL AS IT IS DESCRIBED WITHIN THIS SAFETY DATA SHEET. TRANSPORTATION CLASSIFICATIONS MAY VARY BY MODE OF TRANSPORTATION, PACKAGE SIZES, AND VARIATIONS IN REGIONAL OR COUNTRY REGULATIONS.

SECTION 15. REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY
LISTED SUBSTANCES IN THE PRODUCT ARE AT LOW ENOUGH LEVELS TO NOT BE EXPECTED TO EXCEED THE RQ

SARA 304 EXTREMELY HAZARDOUS SUBSTANCES REPORTABLE QUANTITY
LISTED SUBSTANCES IN THE PRODUCT ARE AT LOW ENOUGH LEVELS TO NOT BE EXPECTED TO EXCEED THE RQ

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES THRESHOLD PLANNING QUANTITY

COMPONENTS	CAS-NO.	COMPONENT TPQ (LBS)
PHENOL	108-95-2	10000
PHENOL	108-95-2	500*

*: SOLID IN THE MOLTEN OR POWDERED FORM (PARTICLES < 100 MICRONS), IN SOLUTION, OR MEETING THE NFPA REACTIVITY CRITERIA

SARA 311/312 HAZARDS FIRE HAZARD
ACUTE HEALTH HAZARD
CHRONIC HEALTH HAZARD

SARA 313 COMPONENTS THE FOLLOWING COMPONENTS ARE SUBJECT TO REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313:

	CAS-NO.	CONCENTRATION
PHENOL	108-95-2	>= 1 - < 5 %

CLEAN AIR ACT
THIS PRODUCT NEITHER CONTAINS, NOR WAS MANUFACTURED WITH A CLASS I OR CLASS II ODS AS DEFINED BY THE U.S. CLEAN AIR ACT SECTION 602 (40 CFR 82, SUBPT. A, APP.A + B).
THE FOLLOWING CHEMICAL(S) ARE LISTED AS HAP UNDER THE U.S. CLEAN AIR ACT, SECTION 112 (40 CFR 61):
PHENOL 108-95-2 >= 1 - < 5 %

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS LISTED UNDER THE U.S. CLEAN AIR ACT SECTION 112(R) FOR ACCIDENTAL RELEASE PREVENTION (40 CFR 68.130, SUBPART F).
THE FOLLOWING CHEMICAL(S) ARE LISTED UNDER THE U.S. CLEAN AIR ACT SECTION 111 SOCMI INTERMEDIATE OR FINAL VOC'S (40 CFR 60.489):
PHENOL 108-95-2 >= 1 - < 5 %

CLEAN WATER ACT

THE FOLLOWING HAZARDOUS SUBSTANCES ARE LISTED UNDER THE U.S. CLEANWATER ACT, SECTION 311, TABLE 116.4A:

PHENOL	108-95-2	>= 1 - < 5 %

THE FOLLOWING HAZARDOUS CHEMICALS ARE LISTED UNDER THE U.S. CLEANWATER ACT, SECTION 311, TABLE 117.3:

PHENOL	108-95-2	>= 1 - < 5 %

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC POLLUTANTS LISTED UNDER THE U.S. CLEAN WATER ACT SECTION 307

PHENOL	108-95-2	>= 1 - < 5 %

THIS PRODUCT CONTAINS THE FOLLOWING PRIORITY POLLUTANTS RELATED TO THE U.S. CLEAN WATER ACT:

PHENOL	108-95-2	>= 1 - < 5 %

US STATE REGULATIONS

MASSACHUSETTS RIGHT TO KNOW

PHENOL	108-95-2

PENNSYLVANIA RIGHT TO KNOW

PHENOL	108-95-2

MAINE CHEMICALS OF HIGH CONCERN

PRODUCT DOES NOT CONTAIN ANY LISTED CHEMICALS

VERMONT CHEMICALS OF HIGH CONCERN

PHENOL	108-95-2

WASHINGTON CHEMICALS OF HIGH CONCERN

PHENOL	108-95-2

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

TSCA	ALL SUBSTANCES LISTED AS ACTIVE ON THE TSCA INVENTORY

TSCA LIST

NO SUBSTANCES ARE SUBJECT TO A SIGNIFICANT NEW USE RULE.
NO SUBSTANCES ARE SUBJECT TO TSCA 12(B) EXPORT NOTIFICATION REQUIREMENTS.

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H227	COMBUSTIBLE LIQUID.
H302	HARMFUL IF SWALLOWED.
H315	CAUSES SKIN IRRITATION.
H319	CAUSES SERIOUS EYE IRRITATION.
H341	SUSPECTED OF CAUSING GENETIC DEFECTS.
H373	MAY CAUSE DAMAGE TO ORGANS (NERVOUS SYSTEM, KIDNEY, LIVER, AND SKIN) THROUGH PROLONGED OR REPEATED

	EXPOSURE.
H411	TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

MSDS LEGEND

MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL HYGINISTS
CAS:	CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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