

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: HEPARIN LOCK FLUSH SOLUTION

PRODUCT IDENTIFIER(S): HEPARIN LOCK FLUSH

GENERAL USE: BLOOD MODIFIER

MANUFACTURER	EMERGENCY TELEPHONE NUMBER
FUJISAWA USA, INC.	(800) 727-7003
3 PARKWAY NORTH	
DEERFIELD, IL 60015-2548	
(847) 317-8800	

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT: HEPARIN SODIUM (PORCINE)  
CAS REGISTRY # 9041-08-1

OSHA PEL	NE	PPM	OSHA PEL	NE	MG/M3
ACGIH TLV	NE	PPM	ACGIH TLV	NE	MG/M3
STEL	NE	PPM	STEL	NE	MG/M3

PERCENT OF PRODUCT: NG  
NOTE: 10, 100 & 500 USP UNITS

COMPONENT: METHYLPARABEN  
CAS REGISTRY # 99-76-3

OSHA PEL	NE	PPM	OSHA PEL	NE	MG/M3
ACGIH TLV	NE	PPM	ACGIH TLV	NE	MG/M3
STEL	NE	PPM	STEL	NE	MG/M3

PERCENT OF PRODUCT: 0.15%  
NOTE: NOT PRESENT IN 1710

COMPONENT: PROPYLPARABEN  
CAS REGISTRY # 94-13-3

OSHA PEL	NE	PPM	OSHA PEL	NE	MG/M3
ACGIH TLV	NE	PPM	ACGIH TLV	NE	MG/M3
STEL	NE	PPM	STEL	NE	MG/M3

PERCENT OF PRODUCT: 0.015%  
NOTE: NOT PRESENT IN 1710

COMPONENT: SODIUM CHLORIDE  
CAS REGISTRY # 7647-14-5

OSHA PEL	NE	PPM	OSHA PEL	NE	MG/M3
ACGIH TLV	NE	PPM	ACGIH TLV	NE	MG/M3
STEL	NE	PPM	STEL	NE	MG/M3

PERCENT OF PRODUCT: 0.9%  
NOTE: 9 MG/ML

COMPONENT: WATER FOR INJECTION  
CAS REGISTRY # 7732-18-5

OSHA PEL	NE	PPM	OSHA PEL	NE	MG/M3
ACGIH TLV	NE	PPM	ACGIH TLV	NE	MG/M3
STEL	NE	PPM	STEL	NE	MG/M3

PERCENT OF PRODUCT: NG  
NOTE: QS TO VOLUME

3. HAZARD IDENTIFICATION

PRIMARY ROUTES OF EXPOSURE - INHALATION, EYE/SKIN ABSORPTION AND INGESTION.

CHEMICAL LISTING AS CARCINOGEN BY CAS NO. :  
CAS NO.S: 9041-08-1, 99-76-3, 94-13-3, 7647-14-5  
NATIONAL TOXICOLOGY PROGRAM: NO  
IARC MONOGRAPHS: NO  
OSHA: NO

#### 4. EMERGENCY AND FIRST AID PROCEDURES

INHALATION: MOVE PERSON TO FRESH AIR IMMEDIATELY. GIVE ARTIFICIAL RESPIRATION AND CARDIOPULMONARY RESUSCITATION (CPR) IF REQUIRED. SEEK MEDICAL ATTENTION.

INGESTION: FLUSH MOUTH OUT WITH WATER IMMEDIATELY. SEEK MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING IMMEDIATELY. FLUSH AREA WITH WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION.

EYE CONTACT: IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION.

FOR ADVERSE DRUG REACTION INFORMATION CALL (847) 317- 1276.

#### 5. FIRE FIGHTING MEASURES

##### FIRE AND EXPLOSION DATA:

CLOSED CUP FLASH PT.	NE
OPEN CUP FLASH PT.	NE
FIRE POINT	NE
AUTOIGNITION	NE
LOWER EXPLOSION LIMIT	NE
UPPER EXPLOSION LIMIT	NE

GENERAL HAZARD: 100% RAW MATERIAL IS CONSIDERED A POISON BY INTRAVENOUS ROUTE.

FIRE FIGHTING INSTRUCTION: WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE OR FOAM AS APPROPRIATE.

FIRE FIGHTING EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.

HAZARDOUS COMBUSTION PRODUCTS: NONE

#### 6. ACCIDENTAL RELEASE MEASURES

CLEAN-UP: WEAR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT. USE ABSORBENT TOWELS OR BOOMS TO CLEAN-UP SPILL. WIPE SURFACES CLEAN AND WASH WITH SOAP AND WATER.

#### 7. HANDLING AND STORAGE

WHEN HANDLING PHARMACEUTICAL PRODUCTS, AVOID ALL CONTACT AND INHALATION OF DUST, FUMES, MIST, AND/OR VAPORS ASSOCIATED WITH THE PRODUCT.

STORE PRODUCT BETWEEN 15 AND 30 C (59 AND 86 F).

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

##### ENGINEERING CONTROLS:

UNDER INDICATED USE, GENERAL ROOM VENTILATION IS USUALLY SATISFACTORY. USE LOCAL EXHAUST VENTILATION WHEN NECESSARY.

PERSONAL PROTECTION:

RESPIRATORS - WITH SATISFACTORY VENTILATION, RESPIRATORY PROTECTION NOT USUALLY REQUIRED.  
EYES - SAFETY GLASSES OR GOGGLES RECOMMENDED.  
GLOVES - DISPOSABLE LATEX GLOVES RECOMMENDED.  
CLOTHING - DISPOSABLE GARMENTS IF DIRECT SKIN CONTACT IS ANTICIPATED.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/ODER OTHER CHARACTERISTICS:

CLEAR, COLORLESS, SLIGHTLY YELLOW SOLUTION.

BOILING POINT	NE	VAPOR DENSITY	NE
MELTING POINT	NE	PERCENT VOLATILES	NE
FREEZING POINT	NE	PH	5.0-7.5
VAPOR PRESSURE	NE	MOLECULAR WEIGHT	12000/ VARIES
SOLUBILITY	WATER		
NOTE			

10. STABILITY AND REACTIVITY

STABILITY - STABLE.  
CONDITIONS/MATERIALS TO AVOID - DO NOT ALLOW TO FREEZE.  
HAZARDOUS POLYMERIZATION - WILL NOT OCCUR.

11. TOXICOLOGICAL INFORMATION

SIGNS & SYMPTOMS OF OVEREXPOSURE MAY INCLUDE:  
THIS PRODUCT IS INTENDED FOR THERAPEUTIC USE ONLY WHEN PRESCRIBED BY A PHYSICIAN. POTENTIAL ADVERSE REACTIONS FROM PRESCRIBED DOSES AND OVERDOSES ARE DESCRIBED IN THE PACKAGE INSERT.  
OCCUPATIONAL EXPOSURE HAS NOT BEEN FULLY INVESTIGATED.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE: PRE-EXISTING SKIN AND RESPIRATORY CONDITIONS.

LD50: INTRAVENOUS RAT - 354 MG/KG  
-THIS LD50 REFERS TO 100% RAW MATERIAL.

IMMEDIATE EFFECTS: EYE, SKIN AND RESPIRATORY IRRITATION MAY OCCUR.

DELAYED EFFECTS: NONE

12. TRANSPORT INFORMATION

UN/NA NUMBER	NA
DOT HAZARD CLASS	NA
SHIPPING NAME	NA
SHIPPING LABEL	NA

13. WASTE DISPOSAL

WASTE DISPOSAL - WASTE PRODUCT SHOULD BE INCINERATED IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

14. OTHER INFORMATION

KEY TO ABBREVIATIONS:

NE NOT ESTABLISHED  
NA NOT APPLICABLE  
NG NOT GIVEN  
ACGIH AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

TLV THRESHOLD LIMIT VALUE  
OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  
PEL PERMISSABLE EXPOSURE LIMIT  
STEL SHORT TERM EXPOSURE LIMIT  
PPM PARTS PER MILLION  
IARC INTERNATIONAL AGENCY FOR RESEARCH ON CANCER  
QS QUANTITY SUFFICIENT

\$ENDDTR: