SAFETY DATA SHEETS

This SDS packet was issued with item:

078914349

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

071105667 073662517 073662525 078890332

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078890316



SAFETY DATA SHEET

Product Name: Lidocaine Hydrochloride Injection

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name And Hospira, Inc.

Address 275 North Field Drive

Lake Forest, Illinois 60045

USA

Emergency Telephone CHEMTREC: North America: 800-424-9300;

International 1-703-527-3887; Australia - 61-290372994; UK - 44-870-8200418

Hospira, Inc., Non-Emergency 224 212-2000

Product Name Lidocaine Hydrochloride Injection

Synonyms Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)-monohydrochloride; 2',6'-

Acetoxylidide, 2-(diethylamino)-, hydrochloride

2. HAZARD(S) IDENTIFICATION

Emergency Overview Lidocaine Hydrochloride Injection is a solution containing lidocaine hydrochloride, an

amide-type local anesthetic used as a local anesthetic for pain management. In the workplace, this product should be considered potentially irritating to the skin, eyes and respiratory tract. Possible target organs include the nervous system and cardiovascular

system.

U.S. OSHA GHS Classification

Physical Hazard Class Hazard Category

Not Classified Not Classified

Health Hazards Hazard Class Hazard Category

STOT - RE 2

Label Element(s)

Pictogram

Signal Word Warning

Hazard Statement(s) May cause damage to organs through prolonged or repeated exposures

Precautionary Statement(s)

Prevention Do not breathe vapor or spray

Wash hands thoroughly after handling

Response Get medical attention if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical

attention.

Product Name: Lidocaine Hydrochloride Injection



3. COMPOSITION/INFORMATION ON INGREDIENTS

Active Ingredient NameLidocaine HydrochlorideChemical Formula $C_{14}H_{27}N_2O \bullet HCl$

Component	Approximate Percent by Weight		RTECS Number	
Lidocaine Hydrochloride	≤ 5.0%	73-78-9	AN7600000	

Non-hazardous ingredients include Water for Injection; some preparation may contain up to 7.5% dextrose. Hazardous ingredients present at less than 1% may include sodium chloride; sodium hydroxide and/or hydrochloric acid are used to adjust the pH. Multiple-dose vials contain 0.1% of methylparaben added as a preservative.

4. FIRST AID MEASURES

Eye Contact Remove from source of exposure. Flush with copious amounts of water. If irritation

persists or signs of toxicity occur, seek medical attention. Provide

symptomatic/supportive care as necessary.

Skin Contact Remove from source of exposure. Flush with copious amounts of water. If irritation

persists or signs of toxicity occur, seek medical attention. Provide

symptomatic/supportive care as necessary.

Inhalation Remove from source of exposure. If signs of toxicity occur, seek medical attention.

Provide symptomatic/supportive care as necessary.

Ingestion Remove from source of exposure. If signs of toxicity occur, seek medical attention.

Provide symptomatic/supportive care as necessary.

5. FIRE FIGHTING MEASURES

Flammability None anticipated from this aqueous product.

Fire & Explosion HazardNone anticipated from this aqueous product.

Extinguishing Media As with any fire, use extinguishing media appropriate for primary cause of fire such as

carbon dioxide, dry chemical extinguishing powder or foam.

Special Fire Fighting

Procedures

No special provisions required beyond normal firefighting equipment such as flame

and chemical resistant clothing and self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spill Cleanup and Disposal Isolate area around spill. Put on suitable protective clothing and equipment as

specified by site spill control procedures. Absorb any liquid with suitable material and clean affected area with soap and water. Dispose of spill materials according to the

applicable federal, state, or local regulations.

7. HANDLING AND STORAGE

Handling No special handling required under conditions of normal product use.

Storage No special storage required for hazard control. For product protection, follow storage

recommendations noted on the product case label, the primary container label, or the

product insert.

Special Precautions No special precautions required for hazard control.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

		Exposure Limits						
Component	OSHA-PEL	ACGIH-TLV	AIHA WEEL	Hospira EEL				
Lidocaine Hydrochloride	8-hr TWA: Not	8-hr TWA: Not	8-hr TWA: Not	8-hr TWA: Not				
	Established	Established	Established	Established				

Notes: OSHA PEL: US Occupational Safety and Health Administration - Permissible Exposure Limit

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value.

AIHA WEEL: Workplace Environmental Exposure Level

EEL: Employee Exposure Limit. TWA: 8 hour Time Weighted Average.

Respiratory Protection Respiratory protection is normally not needed during intended product use. However,

if the generation of aerosols is likely, and engineering controls are not considered adequate to control potential airborne exposures, the use of an approved air-purifying respirator with a HEPA cartridge (N95 or equivalent) is recommended under

conditions where airborne aerosol concentrations are not expected to be excessive. For uncontrolled release events, or if exposure levels are not known, provide respirators that offer a high protection factor such as a powered air purifying respirator or supplied air. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions require respirator use. Personnel who wear respirators should be fit tested and

approved for respirator use as required.

Skin Protection If skin contact with the product formulation is likely, the use of latex or nitrile gloves

is recommended.

Eye Protection Eye protection is normally not required during intended product use. However, if eye

contact is likely to occur, the use of chemical safety goggles (as a minimum) is

recommended.

Engineering Controls Engineering controls are normally not needed during the normal use of this product.

9. PHYSICAL/CHEMICAL PROPERTIES

Appearance/Physical State Clear, colorless liquid

Odor NA Odor Threshold NA

pH Between 5.0 and 7.0

Melting point/Freezing Point NA **Initial Boiling Point/Boiling Point Range** NA **Flash Point** NA **Evaporation Rate** NA Flammability (solid, gas) NA Upper/Lower Flammability or Explosive Limits NA Vapor Pressure NA Vapor Density (Air =1) NA

Solubility Very soluble in water and in alcohol; soluble in chloroform;

insoluble in ether.

Partition Coefficient: n-octanol/water NA
Auto-ignition Temperature NA
Decomposition Temperature NA
Viscosity NA

Relative Density



10. STABILITY AND REACTIVITY

Reactivity Not determined.

Chemical Stability Stable under standard use and storage conditions.

Hazardous Reactions Not determined

Conditions to Avoid Not determined

Incompatibilities Strongly alkaline conditions. Methyl vinyl ether; zinc.

Hazardous Decomposition

Products

Not determined. During thermal decomposition, it may be possible to generate irritating vapors and/or toxic fumes of carbon oxides (COx), nitrogen oxides (NOx),

and hydrogen chloride.

Hazardous Polymerization Not anticipated to occur with this product.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: - Not determined for the product formulation. Information for the active ingredient is as follows:

Ingredient(s)	Percent	Test Type	Route of Administration	Value	Units	Species
Lidocaine Hydrochloride	100	LD50	Oral	220	mg/kg	Mouse
				292	mg/kg	Mouse
Lidocaine Hydrochloride	100	LD50	Intraperitoneal	122	mg/kg	Rat
				63	mg/kg	Mouse
Lidocaine Hydrochloride	100	LD50	Intravenous	21	mg/kg	Rat
				15	mg/kg	Mouse
				25.6	mg/kg	Rabbit
				24.5	mg/kg	Guinea Pig
Lidocaine Hydrochloride	100	LD50	Intratracheal	28	mg/kg	Rabbit

LD 50: Dosage that produces 50% mortality.

Occupational Exposure Potential

Information on the absorption of this product via inhalation or skin contact is not available. Published reports suggest that some local anesthetics have some potential to be absorbed through intact skin. Avoid liquid aerosol generation and skin contact.

Signs and Symptoms

None anticipated from normal handling of this product. Inadvertent contact with this product may cause irritation, followed by numbness. Ingestion may cause numbness of the tongue and anesthetic effects on the stomach. In clinical use, this product produces numbness when injected. In normal clinical use, adverse effects may include fever, headaches, agitation, tingling of extremities, general hypotension, bradycardia, dizziness, nausea, vomiting, anemia, back pain, post-operative pain and fetal distress. Systemic absorption can produce central nervous system (CNS) stimulation and/or CNS depression. CNS depression may progress to coma and cardio-respiratory arrest. Signs of cardiovascular toxicity may include changes in cardiac conduction, excitability, refractoriness, contractility, and peripheral vascular resistance. Toxic blood levels may cause atrioventricular block, ventricular arrhythmias, cardiac arrest, and sometimes death. In addition, decreased cardiac output and arterial blood pressure may occur. Allergic-type reactions are rare but may occur due to sensitivity to the local anesthetic or to other formulation ingredients. These reactions are characterized by signs such as urticaria, pruritus, erythema, angioneurotic edema (including laryngeal edema), tachycardia, sneezing, nausea, vomiting, dizziness, syncope, excessive sweating, elevated temperature, and possibly, anaphylactic-like symptoms (including severe hypotension). Cross sensitivity with other amide-type local anesthetics has been reported.



11. TOXICOLOGICAL INFORMATION: continued

Aspiration Hazard None anticipated from normal handling of this product.

Dermal Irritation/ Corrosion None anticipated from normal handling of this product. However, inadvertent contact

with this product may be irritating to broken skin and mucous membranes, and may

produce numbness.

Ocular Irritation/ Corrosion None anticipated from normal handling of this product. However, inadvertent contact

of this product with eyes may produce irritation, numbness, and blurred vision.

Dermal or Respiratory

Sensitization

None anticipated from normal handling of this product. Rarely, allergic-type reactions

have been reported during the clinical use of lidocaine.

Reproductive EffectsNone anticipated from normal handling of this product. In a fertility study in rats,

lidocaine given subcutaneously at a dosage of 30 mg/kg (180 mg/m2) to mating pairs did not produce alterations in fertility or general reproductive performance of rats. Subcutaneous administration of lidocaine to pregnant rats at a dosage of to 50 mg/kg did not produce evidence of harm to the fetus. In rabbits, there was no evidence of harm to the fetus at a subcutaneous dosage of 5 mg/kg. Treatment of rabbits with a subcutaneous dosage of 25 mg/kg produced evidence of maternal toxicity and evidence of delayed fetal development, including a non-significant decrease in fetal weight and an increase in minor skeletal anomalies. The effect of lidocaine on postnatal development was evaluated in rats by treating pregnant female rats daily subcutaneously at dosages of 2, 10, and 50 mg/kg from day 15 of pregnancy and up to 20 days post partum. No signs of adverse effects were seen either in dams or in the pups up to and including the dose of 10 mg/kg; however, the number of surviving pups was reduced at 50 mg/kg, both at birth and the duration of lactation period; this effect is most likely secondary to maternal toxicity. A second study evaluated the effects of lidocaine on post-natal development in the rat that included assessment of the pups from weaning to sexual maturity. Rats were treated subcutaneously for 8 months with 10 or 30 mg/kg lidocaine, a treatment duration that included 3 mating periods. There was no evidence of altered post-natal development in any offspring; however, both doses of lidocaine significantly reduced the average number of pups per litter

surviving until weaning of offspring from the first 2 mating periods.

Mutagenicity The mutagenic potential of lidocaine was evaluated in the Ames Salmonella reverse

mutation assay, an *in vitro* chromosome aberrations assay in human lymphocytes and in an *in vivo* mouse micronucleus assay. There was no indication of any mutagenic

effect in these studies.

Carcinogenicity Long-term studies in animals to evaluate the carcinogenic potential of most local

anesthetics, including lidocaine, have not been conducted.

Carcinogen Lists IARC: Not listed NTP: Not listed OSHA: Not listed

Specific Target Organ Toxicity

- Single Exposure

NA

Specific Target Organ Toxicity

- Repeat Exposure

icity Based on clinical use, possible target organs include the nervous system and the

cardiovascular system.

12. ECOLOGICAL INFORMATION

Aquatic ToxicityNot determined for product.Persistence/BiodegradabilityNot determined for product.BioaccumulationNot determined for product.

Mobility in Soil Not determined for product.



13. DISPOSAL CONSIDERATIONS

Waste Disposal All waste materials must be properly characterized. Further, disposal should be

performed in accordance with the federal, state or local regulatory requirements.

Container Handling and

Disposal

Dispose of container and unused contents in accordance with federal, state and local

regulations.

14. TRANSPORTATION INFORMATION

ADR/ADG/ DOT STATUS Not regulated

Proper Shipping Name NA
Hazard Class NA
UN Number NA
Packing Group NA
Reportable Quantity NA

ICAO/IATA STATUS Not regulated

Proper Shipping Name NA
Hazard Class NA
UN Number NA
Packing Group NA
Reportable Quantity NA

IMDG STATUS Not regulated

Proper Shipping Name NA
Hazard Class NA
UN Number NA
Packing Group NA
Reportable Quantity NA

Notes: DOT - US Department of Transportation Regulations

15. REGULATORY INFORMATION

US TSCA Status Exempt. However, lidocaine hydrochloride is listed on the TSCA inventory.

US CERCLA Status
US SARA 302 Status
US SARA 313 Status
US RCRA Status
US PROP 65 (Calif.)
Not listed
Not listed
Not listed
Not listed

Notes: TSCA, Toxic Substance Control Act; CERCLA, US EPA law, Comprehensive Environmental Response, Compensation, and Liability Act; SARA, Superfund Amendments and Reauthorization Act; RCRA, US EPA, Resource Conservation and Recovery Act; Prop 65, California Proposition 65



15. REGULATORY INFORMATION: continued

GHS/CLP Classification* *In the EU, classification under GHS/CLP does not apply to certain substances and

mixtures, such as medicinal products as defined in Directive 2001/83/EC, which are in

the finished state, intended for the final user.

Hazard Class Hazard Category Pictogram Signal Word Hazard Statement

NA NA NA NA NA

Prevention Do not breathe vapor or spray

Wash hands thoroughly after handling

Response Get medical attention if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical

attention.

EU Classification* *Medicinal products are exempt from the requirements of the EU Dangerous

Preparations Directive.

Classification(s) NA
Symbol NA
Indication of Danger NA
Risk Phrases NA

Safety Phrases S23: Do not breathe vapor/spray

S24: Avoid contact with the skin S25: Avoid contact with eyes

S37/39 Wear suitable gloves and eye/face protection.

16. OTHER INFORMATION

Notes:

ACGIH TLV American Conference of Governmental Industrial Hygienists – Threshold Limit Value

CAS Chemical Abstracts Service Number

CERCLA US EPA law, Comprehensive Environmental Response, Compensation, and Liability Act

DOT US Department of Transportation Regulations

EEL Employee Exposure Limit

 $\begin{array}{ll} IATA & International \ Air \ Transport \ Association \\ LD_{50} & Dosage \ producing \ 50\% \ mortality \\ NA & Not \ applicable/Not \ available \\ \end{array}$

NE Not established

NIOSH National Institute for Occupational Safety and Health

OSHA PEL US Occupational Safety and Health Administration – Permissible Exposure Limit

Prop 65 California Proposition 65

RCRA US EPA, Resource Conservation and Recovery Act
RTECS Registry of Toxic Effects of Chemical Substances
SARA Superfund Amendments and Reauthorization Act

STEL 15-minute Short Term Exposure Limit

STOT - SE Specific Target Organ Toxicity – Single Exposure STOT - RE Specific Target Organ Toxicity – Repeated Exposure

TSCA Toxic Substance Control Act
TWA 8-hour Time Weighted Average

Product Name: Lidocaine Hydrochloride Injection



16. OTHER INFORMATION: continued

MSDS Coordinator: Hospira GEHS
Date Prepared: October 18, 2012
Date Revised: June 02, 2014

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