

Novo Nordisk A/S	DIRECTIONS FOR USE / MATERIAL SAFETY DATA SHEET according to 91/155/EEC
	NOVOLOG® (insulin aspart [rDNA origin] injection)

Trade name	NovoLog® 100 U/ml	CAS-no.	116094-23-6 (active substance)
Chemical name	Aqueous solution for injection Recombinant B28 Insulin Aspart	EC-no.	
Novo Nordisk item no.			
Company	Novo Nordisk Inc. 100 College Road West, Princeton, New Jersey 08540 USA		
Emergency telephone no.			
COMPOSITION / INFORMATION ON CONTENTS			2
Hazardous ingredients	Concentration	Classification	
108-39-4 m-Cresol	0,172 % (w/v)	T;R24/25 C;R34	
108-95-2 Phenol	0,15 % (w/v)	T; R23/24/25-C;34-48/20/21/22-68	
HAZARDS IDENTIFICATIONS			3
Potential Health Effects	Inhalation of aerosols may result in a mild temporary decrease of the blood sugar level (hypoglycaemia). Skin and eye contact may cause mild irritation. Exposure to NovoLog is not known to cause adverse health effects.		
Inflammatory Properties	NovoLog® is not combustible.		
FIRST AID MEASURES			4
After swallowing	Rinse out mouth thoroughly with water and give plenty of water to drink. Do NOT provoke vomiting. Seek medical advice if symptoms persist.		
Skin contact	Remove contaminated clothes and wash contaminated skin thoroughly with plenty of water for at least 15 minutes. Seek medical advice if symptoms persist.		
Eyes	Rinse the eye immediately with plenty of water for at least 15 minutes with the eyelid held wide open. Seek medical advice if symptoms persist.		
Inhalation	Go outside to breathe fresh air.		
PRECAUTIONS IN CASE OF FIRE			5
No special precaution.			Continued

Novo Nordisk A/S	DIRECTIONS FOR USE / MATERIAL SAFETY DATA SHEET according to 91/155/EEC
	NOVOLOG® (insulin aspart [rDNA origin] injection)

ACCIDENTAL RELEASE MEASURES	6
------------------------------------	----------

Use personal protection means when removing the spillage. (See item 8). Absorbed by means of absorbing material (e.g. sand or vermiculite) and sent to proper destruction facilities. (See item 13). Clean up affected area.

HANDLING AND STORAGE	7
-----------------------------	----------

NovoLog must be kept in tightly closed original packings in a well ventilated place.

EXPOSURE CONTROL / PERSONAL PROTECTION MEANS	8
---	----------

Limit value		Smell limit	-
-------------	--	-------------	---

Avoid contact with eyes and skin. Use protection gloves (e.g. Nitrilrubber (Solvex)). There must be easy access to plentiful water supply, emergency- or hand shower/eye rinsing bottle.

PHYSICAL AND CHEMICAL CHARACTERISTICS	9
--	----------

Appearance	Colourless liquid with a smell of cresol/phenol	pH	App. 7,4 (at 20° C)
Chemical formula	C ₂₅₆ H ₃₈₁ N ₆₅ O ₇₉ S ₆	Molecular weight	5825,8 Dalton
Density	1,005 (at 25°C)	Freezing point	No information
Boiling point	100°C	Flash point	Not applicable
Log P octanol/water	Not applicable	Vapour pressure	No information

STABILITY AND REACTIVE POWER	10
-------------------------------------	-----------

NovoLog® is stable under normal circumstances.

TOXICOLOGICAL DATA	11
---------------------------	-----------

LD ₅₀ -value, oral (rat)		LD ₅₀ -value, dermal (rat)	-
-------------------------------------	--	---------------------------------------	---

Effects on long-term:	No	Under suspicion	Yes	Contradictory information	None
Carcinogenic	X				
Allergy (contact allergy)					X
Allergy (inhalation allergy)					X
Teratogenetic	X				
Nerve damaging	X				

Novo Nordisk A/S	DIRECTIONS FOR USE / MATERIAL SAFETY DATA SHEET according to 91/155/EEC
	NOVOLOG® (insulin aspart [rDNA origin] injection)

ENVIRONMENT INFORMATION				12
Do not allow to enter waters, waste water, or soil.				
DISPOSAL CONSIDERATIONS				13
This material and its container must be disposed of as hazardous waste. Spillage and waste are to be collected in proper receptacles and disposed at an approved site according to existence of local regulations regarding disposal.				
INFORMATION ON TRANSPORT				14
UN.no	-	Shipping name	-	
ADR	Not dangerous goods	IMDG	Not dangerous goods	
RID	Not dangerous goods	IATA	Not dangerous goods	
REGULATORY INFORMATION				15
Class of risks	Not classified	Symbol:		
R-phrases:	No R-phrases			
S-phrases:	No S-phrases			
No special regulations.				
OTHER INFORMATION				16
No demand for special education, but persons handling NovoLog must be familiar with the instructions mentioned in these Material Safety Data.				