MATERIAL SAFETY DATA SHEET

1	**IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**	
1.1	**Product identifiers**	
	Product Name	HEXYL NICOTINATE
	CAS NO.	23597-82-2
1.2	**Relevant identified uses of the substance or mixture and uses advised against**	
	Identified uses	Laboratory chemicals, Manufacture of substances
1.3	**Details of the supplier of the safety data sheet**	
	COMPANY	DR. J. PHARMACHEM (INDIA)
		722/AB/15 'NIRMAL' ,LAXMI PARK COLONY,
		NAVI PETH , PUNE- 411 030.INDIA
		Telephone : 020-24530071
		Fax : 020-24530110
2	**HAZARDS IDENTIFICATION**	
	SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Irritating to eyes, respiratory system and skin.	
3	**COMPOSITION/INFORMATION ON INGREDIENTS**	
3.1	**Substances**	
	Synonyms	**Nicotinic acid hexyl ester**
	Formula	C12H17NO2
	Molecular Weight	207.27
	Component	**Concentration**
	Hexyl Nicotinate	Min 98%
	Other unknown impurities	Up to 2%
4	**FIRST AID MEASURES**	
4.1	**Description of first aid measures**	
	If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
	In case of skin contact	Wash off with soap and plenty of water.
	In case of eye contact	Flush eyes with water as a precaution.
	If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2	**Most important symptoms and effects, both acute and delayed**	
	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	
4.3	**Indication of any immediate medical attention and special treatment needed**	

	No data available	
5	**FIREFIGHTING MEASURES**	
5.1	**Extinguishing media**	
	Suitable extinguishing media	Use water spray, appropriate foam, dry chemical or carbon dioxide.
5.2	**Special hazards arising from the substance or mixture**	Emits toxic fumes under fire conditions.
5.3	**Advice for firefighters**	Wear self contained breathing apparatus for firefighting if necessary.
5.4	**Further information**	No data available
6	**ACCIDENTAL RELEASE MEASURES**	
6.1	**Personal precautions, protective equipment and emergency procedures**	
	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.	
6.2	**Environmental precautions**	
	Do not let product enter drains	
6.3	**Methods and materials for containment and cleaning up**	
	Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.	
6.4	**Reference to other sections**	
	For disposal see section 13.	
7	**HANDLING AND STORAGE**	
7.1	**Precautions for safe handling**	
	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.	
7.2	**Conditions for safe storage, including any incompatibilities**	
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place.	
7.3	**Specific end uses**	
	no data available	
8	**EXPOSURE CONTROLS/PERSONAL PROTECTION**	
8.1	**Control parameters**	
	Components with workplace control parameters	
8.2	**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	
	Safety glasses with side-shields .Use equipment for eye protection tested and approved under appropriate government standards .	
	Skin protection	
	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.	

	Body Protection	
	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace	
	Respiratory protection	
	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). 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.	
9	**PHYSICAL AND CHEMICAL PROPERTIES**	
9.1	**Information on basic physical and chemical properties**	
a)	Appearance	Form : liquid
b)	Odour	Typical ester smell
c)	Odour Threshold	No data available
d)	pH	No data available
e)	Melting range/freezing range	No data available
f)	Initial boiling point and boiling range	329.1 ℃ at 760 mmHg
g)	Flash point	127.8 ℃
h)	Enthalpy of Vaporization	57.16 kJ/mol;
i)	Index of Refraction	1.495
j)	Molar Refractivity	59.28 cm^3;
k)	Vapour pressure	0.000181 mmHg at 25 ℃.
l)	Density	1.02 g/cm^3
m)	Oxidizing properties	No data available
n)	Solubility	No data available
o)	Partition coefficient: noctanol/water	Log Kow: 3,236
p)	Polarizability	No data available
q)	Decomposition temperature	No data available
r)	Molar Volume	203 cm^3
s)	Surface Tension	38.2 dyne/cm
9.2	**Other safety information**	
	IUPAC Name	Hexyl pyridine-3-carboxylate
	Molecular Formula	C12H17NO2
	Molecular Weight	207.27
	SMILES	CCCCCCOC(=O)C1=CN=CC=C1
	InChI	InChI=1S/C12H17NO2/c1-2-3-4-5-9-15-12(14)11-7-6-8-13-10-11/h6-8,10H,2-5,9H2,1H3
	EINECS	245-767-4
10	**STABILITY AND REACTIVITY**	
10.1	**Reactivity**	no data available
10.2	**Chemical stability**	no data available
10.3	**Possibility of hazardous reactions**	no data available
10.4	**Conditions to avoid**	no data available
10.5	**Incompatible materials**	Strong oxidizing agents
10.6	**Hazardous decomposition products**	Carbon monoxide, Carbon dioxide, Nitrogen oxides.
11	**TOXICOLOGICAL INFORMATION**	

11.1	**Information on toxicological effects**		
	Acute toxicity	no data available	
	Skin corrosion/irritation	no data available	
	Serious eye damage/eye irritation	no data available	
	Respiratory or skin sensitization	no data available	
	Germ cell mutagenicity	no data available	
	Carcinogenicity	no data available	
	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	
	Potential health effects		
	Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.	
	Ingestion	Harmful if swallowed.	
	Skin	May be harmful if absorbed through skin. May cause skin irritation.	
	Eyes	May cause eye irritation.	
	Signs and Symptoms of Exposure		
	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.		
	Additional Information		
	RTECS	Not available	
12	**ECOLOGICAL INFORMATION**		
12.1	**Toxicity**	no data available	
12.2	**Persistence and degradability**	no data available	
12.3	**Bioaccumulative potential**	no data available	
12.4	**Mobility in soil**	no data available	
12.5	**Results of PBT and vPvB assessment**	no data available	
12.6	**Other adverse effects**	no data available	
13	**DISPOSAL CONSIDERATIONS**		
13.1	**Waste treatment methods**		
	Product		
	Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.		
	Contaminated packaging		
	Dispose of as unused product.		
14	**TRANSPORT INFORMATION**		
14.1	**UN number**		
	ADR/RID	IMDG	IATA
	-	-	-
14.2	**UN proper shipping name**		
	ADR/RID	IMDG	IATA
	Not dangerous goods	Not dangerous goods	Not dangerous goods
14.3	**Transport hazard class(es)**		

	ADR/RID	IMDG	IATA
	-	-	-
14.4	**Packaging group**		
	ADR/RID	IMDG	IATA
	-	-	-
14.5	**Environmental hazards**		
	ADR/RID	IMDG Marine pollutant	IATA
	no	no	no
14.6	**Special precautions for user**		
	no data available		
15	**REGULATORY INFORMATION**		
15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**		
	no data available		
15.2	**Chemical Safety Assessment**		
	no data available		
16	**OTHER INFORMATION**		
	Further information		
	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Dr J Pharmachem (India) and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.jpharmachem.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale. Month of creation :- September 2013 Month of revision :- September 2016		