



## Material Safety Data Sheet

### 1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT NAME	Inhibited Transformer Insulating Oils
CHEMICAL NAME	VELVEX 12463 IT (Inhibited Transformer Oil meeting BIS 12463/1988 Specification), VELVEX 60296 HGIT , VELVEX 148 IT ,VELVEX 296 IT,VELVEX 60296 TIT
MANUFACTURER	<b>Nandan Petrochem Limited,</b> B-601 , Lotus Corporate Park ,Ram Mandir Lane , Jay coach Junction , Western Express Highway , Goregaon East , Mumbai -400063 India. <a href="tel:91-22-42577200">Tel:91-22-42577200</a> , 02232031075,Fax  +91-22-25545864 Email: <a href="mailto:info@nandangroup.com">info@nandangroup.com</a>

### 2. Composition and Ingredients

Components	CAS No.	Range in %
Petroleum Distillate	64742-55-8	0 to 100%
Hydro treated – Light	64742-53-6	0 to 100%
Refined Mono Aromatics	84961-70-6	0 to 20%
DBPC	128-37-0	0.0 to 0.4%

This product is NOT HAZARDOUS according to OSHA 29 CFR 1910.1200

### 3. Hazards Identification

<b>Eyes</b>	Expected to cause no more than minor eye irritation
<b>Oral</b>	Ingestion of this product and subsequent vomiting can result in aspiration into the lungs, causing chemical pneumonia and lung damage
<b>Inhalation</b>	Breathing the vapour or mist at concentrations in air that exceed the ACGIH TLV can cause respiratory irritation or discomfort
<b>Skin</b>	Expected to cause no more than minor skin irritation. Prolonged or frequently repeated contact may cause more severe irritation or may cause the skin to become cracked or dry from the defatting action of this material
<b>Long Term Toxic Effects</b>	The base oil component(s) are not expected to be carcinogenic.



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### 4. First Aid Measures

<b>Eyes</b>	Flush eyes immediately with fresh water for several minutes while holding the eyelids open. If irritation persists, see a doctor
<b>Skin</b>	Wash skin thoroughly with soap and water. If skin irritation persists or a rash develops as a result of excessive contact, see a doctor. Launder contaminated clothing
<b>Ingestion</b>	Do not induce vomiting. Aspiration of the material can cause serious lung injury such as chemical pneumonia. Call a doctor immediately. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	If respiratory irritation or any signs or symptoms as described in this MSDS occur, move the person to fresh air. If any of these effects continue, see a doctor
<b>Advice to Doctor</b>	This product may present an aspiration hazard. See related comments in this MSDS. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours

### 5. Fire Fighting Measures

<b>Ignition Temperature, °C</b>	Not determined
<b>Flammable Limits (% by Volume)</b>	Not determined
<b>Flash Point, °C</b>	More than 135 (COC)
<b>Fire Extinguishing Agents</b>	According to the US National Fire Protection Association Guide, use water spray, dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to provide protection for personal attempting to stop the leak
<b>Explosion Hazards</b>	For fires involving this material, do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency

### 6. Accidental Release Measures

<b>In case of Spill</b>	Stop the source of the leak or release and contain spill if possible. Ventilate the area. Use respirator and protective clothing as discussed in this MSDS. Cover spill with a generous amount of inert absorbent. Use a stiff broom to mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with additional absorbent and place in a disposable container. Prevent contamination of groundwater or surface water
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### 7. Handling and Storage

Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

Misuse of empty containers can be hazardous. DO NOT cut, weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

### 8. Exposure Control/Personal Protection

<b>Eyes</b>	No special eye protection is usually necessary. Safety glasses, chemical type goggles, or face shield appropriate where splashing or misting is expected during routine operations or spill clean-up.
<b>Skin</b>	Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin several times daily with soap and water and laundering or dry cleaning soiled work clothing at least daily.
<b>Inhalation</b>	Respiratory protection is normally not required. However, if operating conditions create airborne concentrations which exceed the recommended exposure standard(s), the use of an approved respirator is recommended. Wear approved respiratory protection such as toxic dust, mist and fume respirator
<b>Ventilation</b>	Use adequate ventilation to keep the airborne concentrations of this material below the ACGIH TLV for mineral oil mists. Local exhaust ventilation and/or enclosure of the processes is preferred in these cases
<b>Exposure Limits</b>	The ACGIH TLV for mineral oil mists is 5 mg/m <sup>3</sup> for a daily 8-hour exposure

### 9. Physical and Chemical Properties

Note: The following data may represent a range of approximate or typical values for products in the same family. Precise technical information is provided in Product Bulletins and can be obtained from your Marketing Representative.

<b>Appearance and Odor</b>	Clear white , odorless
<b>Boiling Point</b>	Not determined
<b>Vapor Pr (mm HG @ 25 °C)</b>	Not determined
<b>Density( kg/l at 29.5 °C)</b>	0.89 Max.
<b>Vapor Density (Air=1)</b>	Not determined
<b>Undiluted product's pH</b>	Not applicable
<b>Solubility in Water</b>	Negligible
<b>Percent Volatile by Volume</b>	Not determined
<b>Evaporation</b>	Not determined
<b>Viscosity</b>	Max. 27 mm <sup>2</sup> /s at 27°C For Velvex 12463 IT, Max 16.5 mm <sup>2</sup> /s at 40°C for Velvex 296 IT and Velvex 148 IT Max 12.0 mm <sup>2</sup> /s at 40°C for Velvex 60296 HGIT and Velvex 60296 TIT



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### 10. Stability and Reactivity

<b>Hazardous Polymerizations</b>	DO NOT OCCUR
<b>Products of Combustion</b>	Carbon monoxide, carbon dioxide, and aldehydes and ketones, combustions products of nitrogen and sulfur
<b>Conditions to Avoid</b>	Strong oxidizers as chlorates, nitrates, peroxides etc

### 11. Toxicological Information

<b>General</b>	Based on available toxicological information the oil produces no adverse effects on health when properly handled and used. No special precautions are suggested beyond attention to good personal hygiene including laundering any oil soaked clothing and washing contact area with soap and water.
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### 12. Ecological Information

<b>Environmental Effects</b>	This product is expected to have low aquatic toxicity and is not considered to represent a long-term danger to the aquatic environment. This material may present environmental risks common to oil spills
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### 13. Disposal Considerations

<b>Waste Disposal</b>	Place contaminated materials are disposable containers and dispose off in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material
<b>Remarks</b>	This material may present environmental risks common to oil spills. Contact your local oil spill response group and applicable government agencies if a spill occurs

### 14. Transport Information

<b>Transportation of Dangerous</b>	Not Applicable
<b>UN Number</b>	Not Applicable
<b>Dangerous Goods Class</b>	Not applicable
<b>Hazchem Code</b>	Not applicable
<b>Additional Information</b>	None Determined

### 15. Regulatory Information

<b>Respirator Information</b>	In the absence of local approval authorities/standard regulations. Respirators must meet central standard for approved respirators
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### 16. Other Information — No specific notes on this product.

**Note:** The above data is based on the information presently available to us. The data provided is without any warranty, express or implied, regarding its reactions and accuracy. It is the user's responsibility to determine safe conditions for use of this product and to assure liability for loss, injury, damage or expense resulting from improper use of this product.