

Revision Date:15-Jan-2020

Section 1-Identification of Substance/ Identification of Company		
Product name	Tat (48-60)	
Product Cat. No.	319090	
Chemical Formula:	$C_{70}H_{131}N_{35}O_{16}$	
Supplier:	NovoPro Bioscience Inc.	
11	Phone: +86-21-61941042	
	Fax: 86-216-194-1042	
Section 2-Composition / Information on Ingredients		
Substance/Preparation:	Substance	
Ingredient Name	Tat (48-60)	
SARA 313	No	
Section 3- Hazards Identification		
Section 3- Hazards Identification		
Section 3- Hazards Identification Classification	This substance/mixture is not considered hazardous by the	
	This substance/mixture is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR	
	2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)	
Classification	2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)	
Classification GHS Label elements, including precautio	2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) mary statements	
Classification GHS Label elements, including precaution Signal Word	2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) mary statements Not classified	
Classification GHS Label elements, including precaution Signal Word Hazard statement(s)	2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) mary statements Not classified None.	
Classification GHS Label elements, including precaution Signal Word Hazard statement(s) Precautionary Statement(s)	2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) mary statements Not classified None. None.	
Classification GHS Label elements, including precaution Signal Word Hazard statement(s) Precautionary Statement(s) Supplementary Hazard Information	2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) mary statements Not classified None. None. May produce an allergic reaction	

For additional information on toxicity, please refer to Section 11.

Section 4- First Aid Measures	
Oral Exposure	If swallowed, wash out mouth with water provided person
	is conscious. Call a physician.
Inhalation Exposure	If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
Dermal Exposure	In case of skin contact, flush with copious amounts of
Dormai Enposaro	water for at least 15 minutes. Remove contaminated
	clothing and shoes. Call a physician.
Eye Exposure	In case of contact with eyes, flush with copious amounts of
	water for at least 15 minutes. Assure adequate flushing by
	separating the eyelids with fingers. Call a physician.
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Section 5- Fire Fighting Measures	
Flash Point	Not available
Autoignition Temp	Not available
Flammability	Not available
Extinguishing Media	
Suitable	Carbon dioxide, dry chemical powder, or appropriate foam.
	Water spray
Fire Fighting	
Protective Equipment	Wear self-contained breathing apparatus and protective
	clothing to prevent contact with skin and eyes.
Specific Hazard(s)	Emits toxic fumes under fire conditions.
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Soction 6 Accidental Release Measure	205
Section 6- Accidental Release Measur Procedure to be Followed in Case of	Evacuate area
Leak or Spill	
Procedure(s) of Personal Precaution(s)	Wear respirator, chemical safety goggles, rubber boots,
	and heavy rubber gloves
Methods for Cleaning up	Sweep up, place in a bag and hold for waste disposal.
	Avoid raising dust. Ventilate area and wash spill site after
	material pickup is complete.
Section 7-Handling and Storage	
Handling	
User Exposure	Avoid inhalation. Avoid contact with eyes, skin, and
	clothing. Avoid prolonged or repeated exposure.
Storage	
Suitable	Keep tightly closed
Storage at -20°C	
Section 8-Exposure Controls/Persona	
Engineering Controls	Mechanical exhaust required
Personal Protective equipment	Hee memiurtane and common ants tests days days and
Respiratory	Use respirators and components tested and approved
	under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required.
	Where protection from nuisance levels of dusts are desired,
	use type N95 (US) or type P1 (EN 143) respirator.
Other	Wear appropriate government approved respirator,
	chemical-resistant gloves, safety goggles, other protective
	clothing.
General Hygiene Measures	Wash thoroughly after handling
Section 9- Physical and Chemical Pro	perties
Appearance	
Physical State	Powder
Property	
Molecular Weight	1719.01
Molecular Weight pH	Not available
Molecular Weight pH BP/BP Range	Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range	Not available Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point	Not available Not available Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure	Not available Not available Not available Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density	Not available Not available Not available Not available Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc.	Not available Not available Not available Not available Not available Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc. SG/Density	Not available Not available Not available Not available Not available Not available Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc. SG/Density Bulk Density	Not available Not available Not available Not available Not available Not available Not available Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc. SG/Density	Not available Not available Not available Not available Not available Not available Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc. SG/Density Bulk Density Odor Threshold	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc. SG/Density Bulk Density Odor Threshold Volatile%	Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc. SG/Density Bulk Density Odor Threshold Volatile% VOC Content	Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc. SG/Density Bulk Density Odor Threshold Volatile% VOC Content Water Content Solvent Content Evaporation Rate	Not available Not available
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc. SG/Density Bulk Density Odor Threshold Volatile% VOC Content Water Content Solvent Content	Not available Not available



Partition Coefficient Decomposition Temp. Flash Point Explosion Limits Flammability Autoignition Temp Refractive Index Optical Rotation Miscellaneous Data Solubility	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available
Section 10- Stability and Reactivity	
Stability Stable Hazardous Decomposition Products Hazardous Decomposition Products Hazardous Polymerization Hazardous Polymerization	Stable Nature of decomposition products not known. Will not occur
Section 11- Toxicological Information	
Route of Exposure Skin Contact Eye contact Inhalation	Avoid contact with skin. Avoid contact with eyes. May cause slight irritation. Avoid breathing vapors or mists. May cause irritation of respiratory tract.
Ingestion Conditions Aggravated by Exposure	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. The toxicological properties have not been thoroughly investigated.

This product is for experimental uses only. The product has not been completely analyzed and all of the hazards may not be known.

Section 12- Ecological Information	
No data available.	
Section 13- Disposal Considerations	
Appropriate Method of Disposal of Substance or Preparation	Contact a licensed professional waste disposal service to dispose of this material. 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.
Section 14- Transport Information	
DOT	
Proper Shipping Name	None
Non-Hazardous for Transport	This substance is considered to be non-hazardous for transport.
IATA	
Non-Hazardous for Air Transport	Non-hazardous for air transport



Section 15- Regulatory Information	
US Classification and Label Text	
US Statements	Caution: The chemical, physical, and toxicological properties of this product have not been thoroughly investigated. Exercise due care.
United States Regulatory information	
SARA Listed	No
Canada Regulatory information	
WHMIS Classification	This product has been classified in accordance with the
	hazard criteria of the CPR, and the MSDS contains all the
	information required by the CPR.
DSL	No
NDSL	No

Section 16- Other Information

NovoPro corporation MSDS is believed to be correct but only used as a guide for experienced personnel, NovoPro shall not be held liable for any damage resulting from the handling or from contact with the above product.