

MATERIAL SAFETY DATA SHEET

Nikko Chemicals Co., Ltd.
1-4-8 Nihonbashi-Bakurocho
Chuoku, Tokyo 103-0002
JAPAN
Tel: +81-3-3661-1677
Fax: +81-3-3664-8620

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1. CHEMICAL PRODUCT IDENTIFICATION

Product Name (Trade Name):	NIKKOL TOCORETINATE-10		
Common Chemical Name:	Caprylic/ Capric Triglyceride d- α -Tocopheryl Retinoate d- α -Tocopherol		
Product code (Supplier)	NIKKO CHEMICALS CO., LTD.		
INCI Name	w%	CAS Number	EINECS Number
CAPRYLIC/CAPRIC TRIGLYCERIDE	89	73398-61-5	277-452-2
TOCOPHERYL RETINOATE	10	40516-49-2	
TOCOPHEROL	1	59-02-9	200-412-2

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:	Mixture		
Information on Hazardous Ingredients:			
Chemical Name	%	CAS Number	EINECS Number

3. HAZARD IDENTIFICATION

Name of Class:	Not applicable
Potential Physicochemical Effects:	Use caution with ignition sources because this product is combustible.
Potential Health Effects:	May cause irritation to the skin, eyes and respiratory tract.
Potential Environmental Effects	No information that should be described.

4. FIRST AID MEASURES

Eye contact:	Flush with clean running water for at least 15 minutes, then seek medical attention.
Skin contact:	Flush with large amounts of water and soap. If symptoms develop, get medical attention.
Inhalation:	Move to fresh air and keep victim lying down and quiet. Seek medical attention, if necessary.
Ingestion:	Wash mouth out with water and drink one or two glasses of water or milk. Seek a doctor immediately. Do not give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Extinguishing Media:	Dry chemical. Foam. Carbon dioxide. Sand.
Special Firefighting Procedures:	Extinguish fire using the above-mentioned extinguishing Medias. Perform the firefighting with well ventilation and/or protective gears. Put away all sources of ignition.
Hazardous Thermal Decomposition Products:	None
Protection of Firefighters:	Wear suitable protective gloves, clothing and eye glasses. In case of insufficient ventilation, wear suitable respiratory equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wear proper protective equipment, including eyeglasses and gloves to avoid direct contact.
Environmental Precautions:	Do not allow spillage to enter sewer system or waterway.
Methods of cleaning up	Scoop or sweep up and collect in suitable containers. If remaining residue is very small in amount, wash it away with large amounts of water.

7. HANDLING AND STORAGE

Handling:	Use and handle in a well-ventilated area. Wear proper protective equipment, including eye glasses and gloves to avoid direct contact. Wash hands and face thoroughly and rinse mouth after handling. Keep away from all sources of ignition.
Storage:	Keep container tightly closed and store in a well-ventilated area. Keep away from all sources of ignition.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Administrative Control Level:	Not established.
Threshold Limit Value:	
ISOH (Japan Society for Occupational Health):	Not established.
ACGIH:	Not established.
Engineering Control:	Local exhaust ventilation system is necessary at workplaces where fine dust particles are generated. Install emergency eyewash and shower facilities near the places where this product is handled or used.
Personal Protective Equipment:	
Respiratory System Protection:	Dust mask with filter, if necessary.
Eye Protection:	Eye goggles, with side shields.
Skin and Body Protection:	Protective clothing with long sleeves.
Hand Protection:	Impermeable gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Description:	Yellow to yellowish brown liquid with a faint, characteristic odor
Specific Gravity (20 C):	0.945 – 0.955
Melting Point:	No data.
Boiling Point:	No data.
Solubility:	Insoluble in water.
pH:	No data.

10. STABILITY AND REACTIVITY

Flash Point:	242°C
Autoignition Temperature:	No data.
Explosive Limit:	No data.
Oxidizing Properties:	No data.
Reactivity:	Not reactive with water under normal conditions.
Hazardous Polymerization:	Will not occur under normal conditions.
Self-reactivity/Explosivity	No data.

11. TOXICOLOGICAL INFORMATION

Skin Corrosivity:	No data.
Primary skin irritation:	Almost no irritation, Irritation Index = 0.21 – 0.46 (rabbit, 15% immersion).
Eye Irritation:	No irritation (Red Blood Cell (RBC)).
Acute Toxicity:	No data.
Phototoxicity:	No phototoxicity (3T3-NR Method: Mouse 3T3 Fibroblast).
Sensitization:	No sensitization (Human, patch, 5 males, 46 females)
Mutagenicity:	Not mutagenic.
Carcinogenicity:	
IRAC:	Not established.
NTP:	Not established.

12. ECOLOGICAL INFORMATION

No data is available.

13. DISPOSAL CONSIDERATIONS

Method of Disposal: Burn in a proper incinerator or request disposal to a locally licensed waste disposal contractor.

14. TRANSPORT INFORMATION

Precautions for Transportation:	Before transportation, make sure containers have no cracks, corrosions or leaks. Load containers securely to prevent sliding, falling or collapsing.
Land –Road/Railway	This product is not classified according to ADR/RID
Inland Waterways	This product is not classified according to ADN
Sea	This product is not classified according to IMDG
Air	This product is not classified according to IATA

15. REGULATORY INFORMATION

Fire Service Law:	Class 4, Type 4 Petroleum
Industrial Safety and Health Law:	Not applicable.
The Poisonous and Deleterious Substance Control Law:	Not applicable.
Enforcement Regulations of Japan Port Regulations Law:	Not applicable.
PRTR Law:	Not applicable.

16. OTHER INFORMATION

History

Revised from issue: May 24, 2004

The information given herein is supposed to describe the product with regard to necessary safety precautions. They do not guarantee special characteristics and are made to the best of our current knowledge.
