VOPTASCH	**Safety Data Sheet**	Sodium Methoxide Powder

Section 1. Identification of the Mixture and of the Company/Undertaking

Product Identifier

Product Name	Sodium Methoxide Powder
Product State	Solid
Product Form	Substance
Product Number	Li.SMO.02

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use of the Substance or Mixture	Chemical intermediate For research and industrial use only Organic synthesis Sodium methoxide is a routinely used base in organic chemistry, applicable to the synthesis of numerous compounds ranging from pharmaceuticals to agrichemicals. As a base, it is employed in dehydrohalogenations and various condensations. It is also a nucleophile for the production of methyl ethers. Industrial applications Sodium methoxide is used as an initiator of anionic addition polymerization with ethylene oxide, forming a polyether with high molecular weight. Biodiesel is prepared from vegetable oils and animal fats, that is, fatty acid triglycerides, by transesterification with methanol to give fatty acid methyl esters (FAMEs). This transformation is catalyzed by sodium methoxide.

Details of the supplier of the safety data sheet

Company	Voptasch
Emergency Telephone	+90 212 912 5181
Fax	+90 212 912 5182
Address	No 394, Block B2, Skyland İstanbul, Türkiye

Section 2. Hazards Identification

OSHA[1] Hazard	Unstable Reactive, Target Organ Effect, Harmful by ingestion., Corrosive
Target Organs	Kidney, ears
Classification (GHS-US)[2]	Acute toxicity, Oral (Category 4) Acute toxicity, Dermal (Category 5) Skin corrosion(Category 1B) Serious eye damage(Category 1) For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS-US labeling

Hazard Pictogram (GHS-US):

Signal Word (GHS-US):	Danger
Hazard Statement (GHS-US):	H302: Harmful if Swallowed H313: May be Harmful in Contact with Skin H314: Causes Severe Skin Burns and Eye Damage
Precautionary Statements(GHS-US):	P280: Wear Protective Gloves/ Protective Clothing/ Eye Protection/ Face Protection P305 + P351 + P338: IF IN EYES: Rinse Cautiously with Water for Several Minutes. Remove Contact Lenses, if Present and Easy to do. Continue Rinsing P310: Immediately Call a POISON CENTER or Doctor/ Physician
Other Hazard:	Reacts Violently with Water
NFPA Rating:	Health Hazard: 3 Fire: 3

1 Occupational Safety and Health Administration
2 Globally Harmonized System in USA

	Reactivity Hazard: 2
Potential Health Effects:	Inhalation: May be Harmful if Inhaled. Material is Extremely Destructive to the Tissue of the Mucous Membranes and Upper Respiratory Tract. Skin: Harmful if Absorbed through Skin. Causes Skin Burns Eyes: Causes eye burns Ingestion: Harmful if Swallowed

Section 3. Composition/ Information on Ingredient

Hazardous Ingredients

Chemical Name	Sodium Methylate
Concentration	>99 %
Cas-No.	124-41-4

Section 4. First Aid Measures

Eye Contact	If wearing contact lenses, remove them. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance
Skin Contact	Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners
Ingestion	If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting
Most important symptoms and effects, both acute and delayed	Corrosive Product, contact with eyes or skin can cause burns; ingestion or inhalation. Can cause internal damage, if this occurs immediate medical assistance is required.
Indication of any immediate medical attention and special treatment needed	In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Section 5. Fire Fighting Measures

Extinguishing Media

Suitable Extinguishing Media	CO_2, Dry Chemical and In case of spillage absorb with inert material (e.g. vermiculite, sand or earth).
Unsuitable Extinguishing Media	Water
Special Hazard Arising from the Substance or Mixture	Combustible. Vapors are Heavier than Air and may Spread Along Floor. Forms Explosive Mixture with Air at Elevated Temperatures. Development of Hazardous Combustion Gases or Vapors Possible in the Event of Fire. In case of fire, the following can be released: Carbon monoxide, carbon dioxide and Sodium oxide May not Get in Touch with: Water The Product Reacts with Water and Generates Heat.
Advice for Fire Fighting	Stay in Danger Area Only with Self-Contained Apparatus. Prevent Skin Contact by Keeping a Safe Distance or by Wearing Suitable Protective Clothing.

Section 6. Accidental Release Measure

Personal precautions, protective equipment and emergency procedures	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection, see section 8.
Environmental precautions	Do not Allow Material to be Released to the Environment Without Proper Governmental Permits.
Methods and materials for containment and cleaning up	Pick up and Arrange Disposal Without Creating Dust. Sweep up and Shovel. Do not Flush with Water. Keep in Suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13

Section 7. Handling and Storage

Precautions for safe handling	Information for Safe Handling: Handle Under Dry Protective Gas

Conditions for safe storage, including any incompatibilities	Keep Container Tightly Sealed Store in Cool, Dry Place in Tightly Closed Containers Ensure Good Ventilation at the Workplace Open and Handle Container with Care Information About Protection Against Explosions and Fires: Keep Ignition Sources Away Protect Against Electrostatic Charges Fumes can Combine with Air to Form an Explosive Mixture Requirements to be Met by Storerooms and Receptacles: Store in a Cool Location. Information About Storage in One Common Storage Facility: Store Away from Water/Moisture. Store Away From Oxidizing Agents. DO NOT Store Together with Liquids. Further Information About Storage Conditions: Store Under Dry Inert Gas. Protect From Humidity and Water. Keep Container Tightly Sealed. Store in Cool, Dry Conditions in well-Sealed Containers "Store Under Lock and Key and with Access Restricted to Technical Experts or Their Assistants Only".

Section 8. Exposure Controls/ Personal Protection

Control Parameter	
Exposure Controls	
Appropriate engineering controls	Properly Operating Chemical Fume Hood Designed for Hazardous Chemicals and Having an Average Face Velocity of at Least 100 Feet per Minute.
Personal protective equipment	
Eye/face protection	Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Full contact: Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M) Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 30 min Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)
Body Protection	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the

	concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK[1] (EN 14387) respirator cartridges as a backup to enginee protection use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH[2] (US) or CEN (EU).
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains
General Protective and Hygienic Measures:	The usual precautionary measure for handling chemicals should be followed: Store protective clothing separately. Avoid contact with the eyes and skin.

Section 9. Physical and Chemical Properties

Physical State	Solid Powder
Color	White
pH	ca. 13 at 10 g/l, 68 ˚F (20˚C)
Melting Point	261 ˚F (127˚C)
Boiling Point	662 ˚F (350˚C) (decomposition)
Flash Point	91 ˚F (33˚C), Method: DIN 51755 Part 1
Evaporation Rate	No Information Available
Flammability (Solid, Gas)	Highly Flammable Liquid and Vapor
Molecular Weight of Sodium Methoxide	54.03 g/mol
Lower Explosion Limit	7.3 %
Upper Explosion Limit	36 %
Water Solubility	at 68˚F (20˚C) (Reacts)
Auto-ignition Temperature	464˚F (240˚C)
Vapour pressure	No Information Available
Explosive Properties	Product is not Explosive. However, Formation of Explosive Air/Vapor Mistures is Possible.

Section 10. Stability and Reactivity

Reactivity	Reacts Violently with Water.
Chemical Stability	Stable under nitrogen in sealed containers.
Possibility of Hazardous Reaction	Neutralization can occur on contact with acids. In certain conditions, this may cause a polymerization reaction. Material decomposes slowly in contact with moist air and rapidly in contact with water.
Conditions to Avoid	Heat, Sparks, Open Flame.
Incompatible Material	Acids. Alcohols. Carbon dioxide. Esters. Halogens. Ketones. Chlorinated Solvents. Moist air. Water.
Hazardous Decomposition Products	Caustic organic vapors. Methanol. Sodium hydroxide. Sodium oxide.

Section 11. Toxicological Information

Information on toxicological effects	Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin. a) acute toxicity; Not conclusive data for classification b) skin corrosion/irritation; Product classified:

1 ABEK
A (Brown) Organic vappours and gases with boiling point >65C
B (Gray) Inorganic gases excluding carbon monoxide
E (Yellow) Sulphur dioxide and acidic gases
K (Green) Ammonia and organic ammonia derivatives

2 National Institute for Occuptional Safety and Health in USA

	Skin Corrosive, Category 1B: Causes severe skin burns and eye damage. c) serious eye damage/irritation; Strong Corrosive Effect. Irritating Effect. d) respiratory or skin sensitisation; Not conclusive data for classification. e) germ cell mutagenicity; Not conclusive data for classification f) carcinogenicity; Not conclusive data for classification g) reproductive toxicity; Not conclusive data for classification h) STOT-single exposure; Based on available data, the classification criteria are not met. i) STOT-repeated exposure; Not conclusive data for classification j) aspiration hazard; Not conclusive data for classification.
Ingredients	
Sodium Methylate	Acute Oral Toxicity LD50 Rat: 2,037 mg/kg (RTECS) Acute Dermal Toxicity LD50 Rat: >2000 mg/kg (IUCILD) Corrosive materials are acutely destructive to the respiratory tract, eyes, skin and digestive tract. Eye contact may result in permanent damage and complete vision loss. Inhalation may result in respiratory effects such as inflammation, edema, and chemical pneumonitis. May cause coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Ingestion may cause damage to the mouth, throat and esophagus. May cause skin burns or irritation depending on the severity of the exposure.
Additional Toxicological Information	"To the Best of our Knowledge the Acute and Chronic Toxicity of This Substance is not Fully Known." Danger Through Skin Absorption. Swallowing will Lead to a Strong Corrosive Effect on Mouth and Throat and to the Danger of Perforation of Esophagus and Stomach.

Section 12. Ecological Information

Eco-toxicity	No Information Vailable
Persistence and Degradability	No Information Vailable
Bio-accumulative Potential	No Information Vailable
Mobility in Soil	No Information Vailable

Section 13. Disposal Considerations

Waste disposal recommendations	Offer Surplus and non-recyclable solutions to a licensed disposal company. 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.
Additional information	Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	Avoid release to the environment.

Section 14. Transport Information

Transport following ADR[1] rules for road transport, RID[2] rules for railway, ADN[3] for inner waterways, IMDG[4] for sea, and ICAO/IATA[5] for air transport.

Land	Transport by road: ADR Transport by rail: RID Transport documentation: Consignment note and written instructions
Sea	Transport by ship: IMDG ("UN Number: 1431 Class: 4.2 (8) Packing Group: II EMS-No: F-A, S-L, Proper Shipping Name: Sodium Methylate, Marine Pollutant: No") Transport documentation: Bill of lading
Air	Transport by plane: ICAO/IATA ("UN Number: 1431 Class: 4.2 (8) Packing Group: II Proper Shipping Name: Sodium Methylate"). Transport document: Airway bill
UN Number	UN No: UN1431
UN proper shipping name	Description: UN 1431, SODIUM METHYLATE POWDER, 4.2 (8), PG II, (D/E)
Transport hazard class(es)	Class(es): 4.2
Packing group	Packing group: II
Environmental hazards	Marine pollutant: No
Special precautions for user	Labels: 3, 8 Hazard number: 38ADR LQ: 5 L

Transport in bulk according to Annex II of MARPOL 73/78	The product is not transported in bulk.

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the mixture	The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer. See annex I of the Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances and the Regulation (EC) No 689/2008 of the European parliament and of the council of 17 June 2008 concerning the export and import of dangerous chemicals and its subsequent updates. Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): P5b. Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products does not affect the product. The product is not affected by the procedure established Regulation (EU) No 649/2012, Concerning the export and import of dangerous chemicals.
Chemical safety assessment	There has been no evaluation a chemical safety assessment of the product.

Product Related Hazard Information's

Hazard Symbols	T = Toxic ; F = Highly flammable
Risk Phrases	Highly Flammable Reacts Violently with Water Toxic by Inhalation, in Contact with Skin and if Swallowed Causes Burns Toxic: Danger of Very Serious Irreversible Effects through Inhalation, in Contact with Skin and if Swallowed.
Safety Phrases	Keep Container Tightly Closed and Dry Keep Away From Sources of Ignition - NO SMOKING

1 European Agreement concerning the International Carriage of Dangerous Goods by Road
2 The Regulation concerning the International Carriage of Dangerous Goods by Rail
3 The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
4 International Maritime Dangerous Goods
5 the International Civil Aviation Organization/the International Air Transport Association

	In Case of Contact With Eyes, Rinse Immediately With Plenty of Water and Seek Medical Advice.
	Wear Suitable Protective Clothing and Gloves
	In Case of Fire, Use Powdered Extinguishing Agent. NEVER USE WATER.
	In Case of Accident or if You Feel Unwell, Seek Medical Advice Immediately
National Regulations	All Components of this Product are Listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory.
	All Components of this Product are Listed on the Canadian Domestic Substances List (DSL).
Information About Limitation of Use	For use Only by Technically Qualified Individuals.

Section 16. Other Information

Full Text of H-Statements Referd to Under Section 2 and 3

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation: vapour)	Acute toxicity (inhalation: vapour) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Flam. Liq. 2	Flammable liquids Category 2
Self-heat. 1	Self-heating substances and mixtures Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H251	Self-heating: may catch fire
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H331	Toxic if inhaled
H336	May cause drowsiness or dizziness
H370	Causes damage to organs