SAFETY DATA SHEET according to Regulation (EC) 1907/2006 and Regulation (EU) 2015/830	Issue date: Revision date: Revision number:	20 11.2020 1
Fuel Modifier TMD		Page 1 z 11

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1.	Product identifier	
	Product name:	Fuel Modifier TMD
	Trade name:	Fuel Modifier TMD-10
		Fuel Modifier TMD-50
		Fuel Modifier TMD-100
		Fuel Modifier TMD-200
		Fuel Modifier TMD-400
		Fuel Modifier TMD-500
		Fuel Modifier TMD-5.000
		Fuel Modifier TMD-10.000
	Registration number:	not registered (mixture).
	Combined Nomenclature from	the Customs Tariff according to EC Regulation 1214/2007: KN 3811 900000 = Other mineral oil additives
	Note: The identification numbers SECTION 3.	of chemical substance or hazardous components of the mixture, see

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses of mixture:	additive for all types of diesel fuel; marine fuel; marine fuel oil; light
	fuel oil

Uses advised against: all other uses different than identified uses.

1.3. Details of the supplier of the Safety Data Sheet

Supplier identification	
Trade name:	NTS Europe s.r.o.
Address:	Učňovská 396/5, 190 00 Praha 9, Czech Republic
VAT number:	CZ09657878
Phone number:	+420 725 100 274

Responsible person for the Safety Data Sheet E-mail: <u>mika@nts-europe.cz</u>

1.4. Emergency telephone number

European Emergency Line112European fire brigade998European ambulance service999Toxicological Information Centre:Phone number:+420 224 919 293; +420 224 915 402Address:Klinika pracovního lékařství 1. LF UK a VFN, Na Bojišti 1, 120 00 Praha 2

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture according to Regulation (EC) 1272/2008

The mixture **is classified as dangerous** according to regulation 1272/2008/EC. **Hazard Class and** Asp. Tox. 1 **Category Code:**

H-statements: H304 For the wording of the listed abbreviations and H-statements, refer to section 16.

The most important adverse physicochemical effects: Not known.

The most important adverse for human health:

SAFETY DATA SHEET according to Regulation (EC) 1907/2006 and Regulation (EU) 2015/830 Fuel Modifier TMD Issue date: Revision date: Revision number:

Page 2 z 11

1

20 11.2020

Inhalation: Ingestion: Contact with skin: Contact with eyes: Not known. May be fatal if swallowed and enters airways. Not known. Not known.

The most important adverse for the environment: Not known.

2.2. Label elements

Labelling of mixture with classification according Directive 1272/2008/EC (CLP):

Hazard pictogram(s):



Signal word:	DANGER
H-statements:	H304 - May be fatal if swallowed and enters airways.
P-statements:	 P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor/ P331- Do NOT induce vomiting. P405 - Store locked up. P501 - Dispose of contents/container to hazardous waste.
supplemental hazard information	No mandatory additional information according to the CLP regulation is required.
Contains:	White mineral oil, naphta (petroleum), hydrotreated heavy Content of benzene less than 0,1% w/w.

2.3. Other hazard

Mixture or its components are not classified as PBT or vPvB, nor they are listed on the candidate list for Annex XIV of the REACH Regulation as of the date of issue of this safety data sheet. (substance is not on SVHC list)

SECTION 3. Composition/information on ingredients

3.2. Mixture

Product name:

Fuel Modifier TMD

Description of mixture: mixture of naphtha petroleum and mineral oil, UVCB substance **Other identification data of substances:**

1) Index No. 2) CAS No. 3) EC No. 4) Registration No.	Chemical Name	Concentration [% w/w]	Classification EC 1272/2008
 not assigned 8042-47-5 232-455-8 not registered, import below 1 tonne / year 	White mineral oil (petroleum)	≤ 87	Asp. Tox. 1 (H304)

SAFETY DATA SHEET	Issue date: Revision date:	20 11.2020
according to Regulation (EC) 1907/2006 and Regulation (EU) 2015/830	Revision number:	1
Fuel Modifier TMD		Page 3 z 11

1) 649-327-00-6 2) 64742-48-9 3) 265-150-3 4) not registered, import below 1 tonne / year	Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha;	≤ 12,7	Asp. Tox. 1 (H304) Muta. 1B (H340) Carc. 1B (H350) Note P
1) 607-022-00-5 2) 141-78-6 3) 201-500-4 4) not registered, import below 1 tonne / year	Ethyl acetate	≤ 0,20	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336) EUH066
1) 607-024-00-6 2) 123-86-4 3) 204-658-1 4) not registered, import below 1 tonne / year	n-Butyl acetate	≤ 0,15	Flam. Liq. 3 (H226) STOT SE 3 (H336) EUH066

year

Note P: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7).

For full text of abbreviations and H and P phrases see SECTION 16.

SECTION 4. First aid measures

4.1. Description of first aid measures

General information:

Symptomatic treatment. In case of health problems or in doubt seek medical treatment.

Inhalation:

Remove to fresh air and make sure if is breathing. Keep the patient at rest and a position comfortable for breathing. Seek medical attention.

Skin contact:

Take off contaminated clothing. Wash with plenty of water and soap. In case that symptoms persist, seek medical attention.

Contact with eyes:

A few minutes gently rinse with water. Remove the contact lenses when they are deployed, and if it can be removed easily. Continue rinsing with water for at least 15 minutes. Seek medical attention immediately.

Ingestion:

Rinse mouth thoroughly immediately by water. Do not induce vomiting! Seek physician immediately.

Personal protective equipment for first aid responders

Ensure the safety of the rescuer. According to extent of first aid given is necessary to use suitable protective equipment – isolated breathing apparatus or mask with filter and eventually the safeguarding by other worker. Always use protective gloves and resuscitation mask in the case artificial respiration. Wash carefully hands after first aid. Always change clothes if during first aid giving the contamination of clothes occurs.

Other data:

Other information concerning the delivery of first aid measures, especially in serious cases of health damage, the attending physician can consult the procedure with Toxikologické informační středisko, Praha, Czech Republic, **phone (continually):** +420 224 919 293, 224 915 402, fax 224 914 570.

4.2. Most important symptoms and effects, both acute and delayed

Danger to eyes: Not known. Risk of skin contact:

SAFETY DATA SHEET according to Regulation (EC) 1907/2006 and Regulation (EU) 2015/830 Fuel Modifier TMD

Issue date: Revision date: Revision number:

1

20 11.2020

Repeated exposure may cause skin dryness or cracking. **Risk of ingestion:** May be fatal if swallowed and enters airways. **Risk of inhalation:** Not known.

Ingestion may be due to gastric irritation caused by vomiting, stomach pain and diarrhea. If the swallowed fluid is absorbed into the lungs, internal pulmonary haemorrhage, pulmonary edema and chemical pneumonia can occur, which can be fatal.

4.3. Indication of any immediate medical attention and special treatment needed

See section 4.1

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Dry chemical powder, foam, carbon dioxide, water mist spray.

Unsuitable extinguishing media:

Full water jet, danger of fire spreading.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Toxic and irritant vapours may be released during combustion.

5.3. Advice for firefighters

Full protective clothing and self-contained breathing apparatus. Cool endangered containers with water. Extinguish the fire from the windy side.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective measures:

Prevent unauthorized access. No smoking. Avoid contact with skin and eyes. Avoid breathing vapours. Wear suitable personal protective equipment. Ensure adequate ventilation / ventilation.

Emergency measures:

Avoid breathing vapours. Wear suitable personal protective equipment. No smoking. Ensure adequate ventilation of work areas. Evacuate area in case of fire. In case of fire, wear full protective clothing and self-contained breathing apparatus.

6.1.2 For emergency responders

Protective equipment: Use suitable personal protective equipment to avoid contact with product.

6.2. Environmental precaution

Avoid leakage into drains/surface, water/ground water and soil.

6.3. Methods and material for containment and cleaning up

6.3.1 Methods of containment of leakage

After using the container with product, have to be tightly closed.

SAFETY DATA SHEET	Issue date: Revision date:	20 11.2020
according to Regulation (EC) 1907/2006 and Regulation (EU) 2015/830	Revision number:	1
Fuel Modifier TMD		Page 5 z 11

6.3.2 Methods for cleaning up

Keep product in tightly closed storage / transport packaging. In case of leakage, prevent entry into drains by covering the drain with impermeable foil or plugs.

Small spill: Spilled product should be covered with an inert absorbent material (for example sand, earth, silica gel, universal binder, vermiculite...), then sweep up and place in a dedicated and labelled waste container.

Large spill: Pour leaked liquid into a waste container, sprinkle the remainder with inert absorbent material (for example sand, earth, silica gel, universal binder, vermiculite...), then sweep up and place in a dedicated and labelled waste container.

Treat the product as hazardous waste.

Disposal see Section 13.

6.4. Reference to other section

See Section 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

7.1.1 Protective precautions

Fire precaution: Use only in well-ventilated areas. Prevent unauthorized persons from entry. No smoking and handling with open fire. Avoid contact with sparks and hot surfaces.

Precaution for elimination of dust and aerosol formation: Ensure efficient ventilation or exhausting.

Environment protection: Avoid leakage into soil/ water sources/ sewer.

7.1.2 Advice on general occupational hygiene

Do not eat, drink or smoke while handling the product. Wash your hands thoroughly with soap and water after work and always before eating, drinking, smoking and using the toilet. Wear suitable personal protective equipment. Use effective ventilation at the workplace. Use only outdoors or in well-ventilated areas. Avoid contact with skin and eyes. Avoid breathing vapours.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and conditions of storage:

Keep containers well labelled, tightly closed, protect from damage. Store the product in a well-ventilated, cool and dry place (temperature - 15°C to 40°C). The store floor should be resistant to chemicals. Store locked up. Do not expose the product to high temperatures and direct sunlight. Store away from food, drink and animal feed.

Incompatible materials: strong oxidants

Storage requirements: Store in cool, dry place in original closable containers. Storage areas must comply with the valid legislative.

7.3. Specific end use(s)

See section 1.2.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Exposure limits according to Government Order No. 361/2007 Coll., as amended

Substance	CAS	Parameter	Parameter
Mineral oil (aerosol)	-	PEL = 5 mg/m ³	NPK-P = 10 mg/m ³
Ethyl acetate*	141-78-6	PEL = 700 mg/m ³	NPK-P = 900 mg/m ³

SAFETY DATA SHEE according to Regulation (EC) 1907/2006 ar Regulation (EU) 2015/830	Revision date:	20 11.2020 1
Fuel Modifier TMD		Page 6 z 11

n-Butyl acetate	123-86-4	PEL = 950 mg/m ³	NPK-P = 1200 mg/m ³	
-----------------	----------	-----------------------------	--------------------------------	--

* irritates mucous membranes (eyes, respiratory tract), resp. skin

Exposure limits for workplace in EU

Substance	CAS	Parameter	Parameter
Ethyl acetate*	141-78-6	Limit value (8 hours)	Limit value (Short term)
Ethyl acetate		=734 mg/m ³	=1468 mg/m ^{3**}
n-Butyl acetate	123-86-4	Limit value (8 hours)	Limit value (Short term)
	123-00-4	=241 mg/m ³	=723 mg/m ^{3**}

** 15 minutes average value

Full text of abbreviations is in SECTION 16.

8.2. Exposure control

8.2.1 Appropriate engineering controls

Measures for the substance / mixture to prevent exposure during specified uses:

Do not smoke, drink and eat in the work area. Hands always thoroughly wash and treat with a suitable skin cream after manipulation with product. Use personal protective equipment. Remove contaminated clothing and wash before reuse.

Technical measures to prevent exposure: Ensure effective ventilation / exhaustion at the workplace.

8.2.2 Personal protective equipment

In the workplace, keep running water or containers with sufficient drinking water or eye washer.

8.2.2.1 Eye/ face protection

Use protective goggles or face shield.

8.2.2.2 Skin protection

Hand protection: Suitable protective working gloves (neoprene or nitrile rubber). Other skin protection: Protective clothing, working shoes.

8.2.2.3 Respiratory protection

Insufficient workplace ventilation - use appropriate respiratory protection (respirator or mask with filter).

8.2.2.4 Thermal hazard

Not known.

8.2.3 Environmental exposure controls

Prevent leakage to surface/ underground water or sewer.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	viscous liquid
Colour:	yellow
Odour:	characteristic of mineral oil
Odour threshold:	1 (OUE/m ³)
pH:	not applicable
Melting point/ freezing point:	-30°C
Initial boiling point and boiling range:	180 °C

	SAFETY DATA SHEET	Issue date: Revision date:	20 11.2020
5 5 1	according to Regulation (EC) 1907/2006 and Regulation (EU) 2015/830	Revision number:	1
	Fuel Modifier TMD		Page 7 z 11

- Flash point: Evaporation rate: Flammability (solid, gas): Upper/lower explosive limits: Vapour pressure: Vapour density: Density: Solubility in the water: Partition coefficient: n-octanol/water: Auto-ignition temperature: Decomposition temperature: Viscosity (kinetic): Explosive properties: Oxidizing properties:
- 165 °C 0,001 not applicable 13/ 2,9 % vol. 0,281 Pa (20°C) not determined 0,865 g/cm³ (20 °C) insolable not determined 530°C 380°C 29 mm²/s (20°C) not determined not determined

9.2. Other information

Not available.

SECTION 10. Stability and reactivity

10.1. Reactivity

Product is not reactive under normal conditions of use.

10.2. Chemical stability

Product is chemical stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Contact with a strong oxidizing agent may cause fire or explosion as result of an exothermic reaction.

10.4. Conditions to avoid

High temperatures, sparks, open flame, static electrical spark.

10.5. Incompatibles materials

Strong oxidants.

10.6. Hazardous decomposition products

Burning will release toxic gases.

SECTION 11. Toxicological information

11.1.Information on toxicological effects

Acute toxicity: White mineral oil (CAS:8042-47-5)

Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: not classified LD50 (rat, oral): > 5000 mg/ kg bw LC50 (rat, inhal): > 5 mg/ I aerosol LD50 (rabbit, dermal): > 2000 mg/ kg bw

> not classified not classified not classified not classified not classified not classified

SAFETY DATA SHEET according to Regulation (EC) 1907/2006 and Regulation (EU) 2015/830	Issue date: Revision date: Revision number:	20 11.2020 1
Fuel Modifier TMD		Page 8 z 11

STOT-single exposure: STOT-repeated exposure: Aspiration hazard: not classified not classified Category 1 May be fatal if swallowed and enters airways. not known

Symptoms related to the physical, chemical and toxicological characteristics:

not known

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

not known

SECTION 12. Ecological information

12.1. Toxicity

Ecotoxicological data are not available.

Information on likely routes of exposure:

12.2. Persistence and durability

Ecotoxicological data are not available.

12.3. Bioaccumulative potential

Ecotoxicological data are not available. Partition coefficient n-octanol / water (log Kow): not determined Bio concentration factor (BCF): not determined

12.4. Mobility in soil

Ecotoxicological data are not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture does not meet the PBT or vPvB criteria according to REACH, Annex Xiii, they are not listed on the candidate list for Annex XIV of the REACH Regulation as of the date of issue of this safety data sheet. (substance is not on SVHC list)

12.6. Other adverse effects

not known

SECTION 13. Disposal considerations

13.1. Waste treatment methods

13.1.1 Removing the product / packaging:

This material and its container must be disposed of as hazardous waste. Waste codes should be assigned by the user, preferably in consultation with the authorities responsible for waste disposal.

Substance treatment methods:

Product has to be disposed as hazardous waste. Product has to be disposed in accordance with law of wastes in valid version and with connecting on legal directives.

List of proposed waste codes / waste designations in accordance with EWC:

13 07 03* Other fuels (including mixtures)

Contaminated container treatment methods:

Contaminated container has to be disposed as hazardous waste. Contaminated container has to be disposed in accordance with law of wastes in valid version and with connecting on legal directives.

SAFETY DATA SHEET according to Regulation (EC) 1907/2006 and	Issue date: Revision date:	20 11.2020
Regulation (EU) 2015/830 Fuel Modifier TMD	Revision number:	1 Page 9 z 11

List of proposed waste codes / waste designations in accordance with EWC:

15 01 10* packaging containing residues of or contaminated by hazardous substances.

Legal regulations relating to waste

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended

13.1.2 Other information

not available

SECTION 14. Transport information

not dangerous for transport

14.1. UN number

not available

- 14.2. UN proper shipping name not available
- 14.3. Transport hazard class(es)

not available

- 14.4. Packing group not available
- 14.5. Environmental hazards not available
- 14.6. Special precautions for user not available

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk is permitted, ie not subject to restrictions according to MARPOL Annex II and the IBC Code.

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation No. 1907/2006/EC, on the Registration, Evaluation, Authorization and Restriction of Chemicals, as amended

Regulation No. 1272/2008 /EC on classification, labeling and packaging of substances and mixtures, as amended

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Regulation No. 361/2007 Coll., Which lays down the conditions for protecting the health of employees at work, as amended

15.2. Chemical safety assessment

Not required – mixture.

Issue date: Revision date: Revision number:

Page 10 z 11

1

SECTION 16. Other information

16.1. Wellspring of information for elaboration of Safety Data Sheet

Safety Data Sheet of Fuel Modifier TMD has been compiled based on the following information:

-Manufacturer identification: OOO "NPK Sintez", member of NTS holding, Timiriazeva str., 1, 153025 Ivanovo, Russian Federation, www.group-nts.com

-SDS Fuel Modifier TMD, NPK SINTEZ, Russian Federation, August 2018

-Composition of Fuel Modifier

-Manufacturer's Declaration: Company NPK Sintez declares that the TMD-10 Fuel Modifier contains less than 0,1% w/w of benzene (EINECS No 200-753-7) and is not classified as carcinogenic or mutagenic.

16.2. Methods used for the purpose of classification of mixture (EC) No 1272/2008 (CLP)

The classifications of substances have been taken from the Annex to Regulation (EC) 1272/2008 and literature.

The overall classification of the product / mixture has been carried out in accordance with the procedure laid down in Regulation (EC) No 1272/2008.

List of relevant H-, P- and EUH-statements (Sections 2. and 3.):

H-statements	
	Linkly flowership liquid and you are
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic effects.
H350	May cause cancer.
P-statements	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out reach of children.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P405	Store locked up.
P501	Dispose of contents/container to hazardous waste.
EUH-statements	
EUH066	Repeated exposure may cause skin dryness or cracking.
	,

16.3. Advices for training

Acquaint the workers with this Safety Data Sheet and with general rules of handling with chemical substances/ mixtures. Training carry out once time per year.

16.4. Important references to literature and data sources

ECHA database of chemical substances (<u>www.echa.eu</u>) as of 24.4.2020. Legislation in force.

20 11.2020

SAFETY DATA SHEET	Issue date: Revision date:	20 11.2020
according to Regulation (EC) 1907/2006 and Regulation (EU) 2015/830	Revision number:	1
Fuel Modifier TMD		Page 11 z 11

16.5. Abbreviations

Asp. Tox. 1	Aspiration hazard, Hazard Category 1
Carc. 1B	Carcinogenicity, Hazard Category 1B
CAS	Registration Number Chemical Abstracts Service
DNEL	Derived no-effect level
Eye Irrit. 2	Serious eye damage/ eye irritation, Category 2
EWC	European Waste Catalogue
Flam. Liq. 2	Flammable Liquids, Hazard Category 2
Flam. Liq. 3	Flammable Liquids, Hazard Category 3
LC ₅₀	Lethal concentration at which 50% of test subjects die
LD ₅₀	Lethal dose at which 50% of test subjects die
Muta. 1B	Germ cell mutagenicity, Hazard Category 1B
PBT	Persistent, bioaccumulative and toxic
STOT SE 3	Specific target organ toxicity — Single exposure, Hazard Category 3,
	Narcosis
SVHC	Substances of Very High Concern.
vPvB	Very persistent and very bio accumulative
UVCB	Unknown Variable Complex Biological

16.6. Other information

The details in this Safety Data Sheet are based on our status of knowledge and experience at the time of date issue. They are not a contractual assurance of quality properties of the product, and they apply only in conjunction with correct and proper handling of the product under normal conditions, and according to the details of specified use on the packing and/or in the technical instructions. The user himself is fully responsible for every other use of the product such as in combination with other products or with other processes.