



22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

Issue date: 3/27/2024 Revision date: 3/27/2024 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : 22034, 22291 Top Tec ATF 1950
Product code :

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Transmission fluids
Restrictions on use : None known

1.3. Supplier

Liqui Moly GmbH
Jerg-Wieland-Strasse 4 Ulm D-89081 Germany
T +49 731 1420 0
info@liqui-moly.de - www.liqui-moly.us

1.4. Emergency telephone number

Emergency number : INFOTRAC
+1800 535 5053 (USA, Canada); +1352 323 3500 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Reproductive toxicity Category 2	H361	Suspected of damaging the unborn child.
Hazardous to the aquatic environment – Acute Hazard Category 3	H402	Harmful to aquatic life
Hazardous to the aquatic environment – Chronic Hazard Category 3	H412	Harmful to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : H361 - Suspected of damaging the unborn child.
H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P273 - Avoid release to the environment.
P280 - Wear protective clothing, protective gloves.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : None known.

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Lubricating Oils (petroleum), C20-50, hydrotreated neutral oil-based	CAS-No.: 72623-87-1	30 - 60
Distillates (petroleum), hydrotreated heavy paraffinic	CAS-No.: 64742-54-7	30 - 60
Highly refined mineral oil (C15-C50)	CAS-No.: Proprietary	5-10
Distillates (petroleum), hydrotreated light paraffinic	CAS-No.: 64742-55-8	1 - 5
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	CAS-No.: 398141-87-2	0.5 - 1.5
1-(tert-dodecylthio)propan-2-ol	CAS-No.: 67124-09-8	0.1 - <1.0
Methyl-1H-benzotriazole	CAS-No.: 29385-43-1	0.1 - <1.0

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with mild soap and water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Get medical attention if irritation develops and persists.
First-aid measures after ingestion	: Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: May cause slight temporary irritation. Suspected of damaging fertility or the unborn child.
Inhalation	: Inhalation of mists or vapors at elevated temperatures may cause respiratory irritation.
Skin	: Repeated or prolonged skin contact may cause dermatitis and defatting.
Eyes	: May cause minor eye irritation.
Ingestion	: Abdominal pain. Diarrhoea.
Chronic symptoms	: Suspected of damaging the unborn child.

4.3. Immediate medical attention and special treatment, if necessary

None under normal conditions. Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Foam. Dry powder. Carbon dioxide.
Unsuitable extinguishing media	: Use of heavy stream of water may spread fire.

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

5.2. Specific hazards arising from the chemical

- Fire hazard : This product is not classified as flammable or combustible.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO₂). Hydrocarbon.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Cool down the containers exposed to heat with a water spray.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with eyes. Avoid repeated or prolonged skin contact.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool. Keep only in original container. Store at room temperature. Store in a dry area.
Incompatible materials : Strong oxidizers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

Lubricating Oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m³ inhalable
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA)	5 mg/m³
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Mineral oil, excluding metal working fluids Pure, highly and severely refined
ACGIH OEL TWA	5 mg/m³ (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Oil mist, mineral
OSHA PEL (TWA)	5 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Highly refined mineral oil (C15-C50) (Proprietary)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m³ inhalable
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA)	5 mg/m³

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
In case of repeated or prolonged contact wear gloves. Consult supplier for specific recommendations.
Eye protection:
Avoid contact with eyes. If there is a risk of liquid being splashed : Use suitable eye protection
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Thermal hazard protection:
Not applicable.

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Brown. Liquid.
Color	: Brown
Odor	: Characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: -54 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 210 °C (410°F)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 0.85 g/cm ³
Solubility	: Insoluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 24.2 mm ² /s @40C
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: None.
Oxidizing properties	: None.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong bases. Strong reducing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Lubricating Oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

LD50 oral rat	5000 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight
LC50 Inhalation - Rat	> 5 mg/l/4h

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight
LD50 dermal rabbit	> 5000 mg/kg Source: IUCLID
LC50 Inhalation - Rat	> 5000 mg/m ³

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rabbit	> 2000 mg/kg Source: IUCLID

Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)

LD50 oral rat	> 10267 mg/kg
LD50 dermal rabbit	4000 – 8000 mg/kg

1-(tert-dodecylthio)propan-2-ol (67124-09-8)

LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 434 (Acute Dermal Toxicity - Fixed Dose Procedure)

Methyl-1H-benzotriazole (29385-43-1)

LD50 oral rat	720 mg/kg body weight (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg body weight (OECD 402 method)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Suspected of damaging the unborn child.

Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)

NOAEL (animal/male, F0/P)	175 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)
NOAEL (animal/female, F0/P)	175 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

Lubricating Oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	
LOAEL (oral, rat, 90 days)	125 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
LOAEL (oral, rat, 90 days)	125 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	> 0.98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)	
NOAEL (oral, rat, 90 days)	500 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
1-(tert-dodecylthio)propan-2-ol (67124-09-8)	
NOAEL (oral, rat, 90 days)	167 mg/kg body weight Animal: rat, Guideline: other:
Methyl-1H-benzotriazole (29385-43-1)	
NOAEL (oral, rat, 90 days)	≈ 150 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

Aspiration hazard	: Not classified
Viscosity, kinematic	: 24.2 mm²/s @40C
Symptoms/effects	: May cause slight temporary irritation. Suspected of damaging fertility or the unborn child.
Inhalation	: Inhalation of mists or vapors at elevated temperatures may cause respiratory irritation.
Skin	: Repeated or prolonged skin contact may cause dermatitis and defatting.
Eyes	: May cause minor eye irritation.
Ingestion	: Abdominal pain. Diarrhoea.
Chronic symptoms	: Suspected of damaging the unborn child.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LC50 - Fish [1]	≥ 100 mg/l
EC50 - Crustacea [1]	> 10000 ml/l
EC50 96h - Algae [1]	> 1000 mg/l Source: IUCLID
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
LC50 - Fish [1]	> 5000 mg/l Source: IUCLID
EC50 - Crustacea [1]	> 1000 mg/l Source: IUCLID
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)	
EC50 - Crustacea [1]	4.6 mg/l Daphnia magna (Water flea)

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

1-(tert-dodecylthio)propan-2-ol (67124-09-8)	
LC50 - Fish [1]	0.75 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	0.58 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	> 100 mg/l Desmodesmus subspicatus
Methyl-1H-benzotriazole (29385-43-1)	
LC50 - Fish [1]	55 mg/l Test organisms (species): Cyprinodon variegatus
EC50 - Other aquatic organisms [1]	15.8 mg/l Test organisms (species): other aquatic crustacea:
EC50 - Other aquatic organisms [2]	8.58 mg/l Test organisms (species): other aquatic crustacea:
EC50 72h - Algae [1]	53 mg/l Test organisms (species): Skeletonema costatum
LOEC (chronic)	37.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	18.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

22034, 22291 Top Tec ATF 1950	
Persistence and degradability	Rapidly degradable
Lubricating Oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	
Persistence and degradability	Rapidly degradable
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Persistence and degradability	Rapidly degradable
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Persistence and degradability	Not rapidly degradable
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)	
Persistence and degradability	Not readily biodegradable.
1-(tert-dodecylthio)propan-2-ol (67124-09-8)	
Persistence and degradability	Not rapidly degradable
Methyl-1H-benzotriazole (29385-43-1)	
Persistence and degradability	Not readily biodegradable.
Highly refined mineral oil (C15-C50) (Proprietary)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6 Source: IUCLID
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6 Source: IUCLID
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)	
Bioconcentration factor (BCF REACH)	31

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

DOT

Not regulated

TDG

Not regulated

IMDG

Not regulated

IATA

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

SECTION 15: Regulatory information

15.1. US Federal regulations

22034, 22291 Top Tec ATF 1950

SARA Section 311/312 Hazard Classes	Refer to Section 2 for OSHA Hazard Classification.
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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Lubricating Oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

Listed on the Canadian DSL (Domestic Substances List)

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List)

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

Listed on the Canadian DSL (Domestic Substances List)

Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)

Listed on the Canadian NDSL (Non-Domestic Substances List)

1-(tert-dodecylthio)propan-2-ol (67124-09-8)

Listed on the Canadian DSL (Domestic Substances List)

Methyl-1H-benzotriazole (29385-43-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

22034, 22291 Top Tec ATF 1950

Listed on the Canadian DSL (Domestic Substances List)

Methyl-1H-benzotriazole (29385-43-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

22034, 22291 Top Tec ATF 1950

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

According to 29CFR 1910.1200 OSHA Hazard Communication Standard and the Hazardous Products Regulation (WHMIS 2015)

Revision date : 3/27/2024

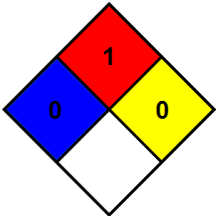
Data sources : This safety data sheet was compiled with data and information from the following sources :
RTECS, ECOSAR, HSDB, SIDS SIAP, CESAR, Chemical DB.

Full text of H-phrases	
H361	Suspected of damaging fertility or the unborn child
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:
new version.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.