

Safety Data Sheet

TI Prime

1. Identification of the substance/ mixture and of the company/ undertaking**1.1 Product identifier**

Trade name: TI Prime
 Synonyms: none

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

Use of the Substance/
 Mixture: Electronic industry, Intermediate for electronic industry

1.3 Details of the supplier of the safety data sheet

Company: MicroChemicals GmbH
 Nicolaus-Otto-Str. 39
 D-89079 Ulm
 Germany

Phone: +49 (0) 731 977343 0
 Fax: +49 (0) 731 977343 29
 E-Mail address: msds@microchemicals.de

Responsible/
 Issuing person: Dr. Christian Koch

1.4 Emergency telephone

Emergency telephone: Tel.: +49 (0) 178 782 51 98 or
 Tel.: +49 (0) 731 36 080 409

2. Hazards identification**2.1 Classification of the substance or mixture**

Classification (REGULATION (EC) No 1272/2008)

GHS Classification

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Classification (67/548/EEC, 1999/45/EC)

R10: Flammable.

Signal word: Warning

Hazard statements: H226: Flammable liquid and vapour.

Precautionary statements: Prevention:
 P210: Keep away from heat/sparks/open flames/ hot surfaces,- Not smoking
 P233: Keep container tightly closed.
 P280: Wear protective gloves/ protective clothing/ eye and face protection.
 Response:
 P303+ P361+ P353: IF ON SKIN: Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P370+ P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
 Storage:

P403+ P235: Store in a well-ventilated place. Keep cool.

3. Composition/ information on ingredients

3.2 Mixtures

Chemical characterization

A preparation of organic solvents.

Hazardous components

WEL substances:

2-Methoxy-1-methyl ethyl acetate

- | | |
|---|-------------------|
| - CAS- Nr.: | 108-65-6 |
| - EC-Nr.: | 203-603-9 |
| - Classification(67/548/EEC): | R10 |
| - GHS Classification (REGULATION: (EC)No 1272/2008) | Flam. Liq.3; H226 |
| - Concentration [%]: | < = 100 |

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

General information:

- Remove soiled or soaked clothing immediately.
- If someone exposed to the product feels unwell, contact a doctor and show this safety data sheet.
- In case of medical condition, contact a physician and submit safety data sheet.
- Adhere to personal protective measures when giving first aid.

Inhalation:

- Remove the casualty into fresh air and keep him calm.
- Call in a physician immediately and show him the safety data sheet.

Skin contact:

- In case of contact with skin wash off immediately with polyethylene glycol 400, then with plenty of water.
- If polyethylene glycol is not available, rinse off with plenty of water.

Eye contact:

- Rinse the affected eye with plenty of water, at the same time keep the unaffected eye well protected.
- Rinse immediately with gently running water for 15 Minutes, maintaining eyelids open. Consult at once an ophthalmologist or a physician.

Ingestion:

- Do not induce vomiting.
- Call in a physician immediately and show him the safety data sheet.
- Let plenty of water be drunk in small gulps

4.3 Indication of any immediate medical attention and special treatment needed

Treatment:

- Treat symptomatically.

5. Fire-fighting measures

5.1 Suitable extinguishing media:

- alcohol-resistant foam
- dry powder

- carbon dioxide
- water spray jet

5.2 Specific hazards during fire-fighting:

- In case of fires, hazardous combustion gases are formed:
Carbon monoxide (CO), Nitrous gases (NO_x), Sulphur dioxide (SO₂)

5.3 Special protective equipment for fire-fighting:

- Use self-contained breathing apparatus
- Well closed full protective clothing (coat and pants) including helmet.

Further information:

- Fire residues and contaminated fire fighting water must be disposed of in accordance with the local regulations.

6. Accidental release measures

6.1 Personal precautions:

- See: Exposure controls and personal protection, chapter 8.

6.2 Environmental precautions:

- Do not allow entry to drains, water courses or soil.

6.3 Methods for cleaning up:

- Pick up with liquid binding materials (e.g. sand, kieselguhr, universal binder) and if necessary fill in containers capable of being locked.
- Dispose of absorbed material in accordance with the regulations.
- Containers in which spilled substance has been collected must be adequately labelled
- Clean contaminated floors and objects thoroughly, observing environmental regulations.
- Ensure adequate ventilation.

6.4 Additional advice:

- Information regarding Safe handling, see chapter 7.
- Information regarding personal protective measures, see chapter 8
- Information regarding Waste Disposal, see chapter 13.

7. Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling:

- Provide good ventilation of working area (local exhaust ventilation if necessary).
- Wear gloves and safety glasses.

Advice on protection against fire and explosion:

- Keep away from sources of ignition
- Keep ignition sources away- do not smoke.
- Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for the storage areas and containers:

- Keep only in the original container

Further information on storage conditions:

- Keep container tightly closed and dry in a cool, well- ventilated place
- Protect from light.

Advice on common storage:

- Do not store or transport together with foodstuffs.

8. Exposure controls/ personal protection

8.1 Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
2-Methoxy-1-Methyl ethyl acetate	108-65-6	TWA	50 ppm 275 mg/m ³	2000-06-16	2000/39/EC
Further information:	Skin: Identifies the possibility of significant uptake through the skin Indicative.				
		STEL	100 ppm 550 mg/m ³	2000-06-16	2000/39/EC
Further information:	Skin: Identifies the possibility of significant uptake through the skin Indicative.				

DNEL

2-Methoxy-1-Methylethylacetate :

- End Use: Workers
- Exposure routes: Skin Contact
- Potential health effects: Chronic effects
- Value: 54,8 mg/kg

- End Use: Workers
- Exposure routes: Inhalation
- Potential health effects: Chronic effects
- Value: 33 mg/m³

- End Use: Workers
- Exposure routes: Ingestion
- Potential health effects: Chronic effects
- Value: 1,67 mg/kg

- End Use: Workers
- Exposure routes: Skin contact
- Potential health effects: Chronic effects
- Value: 153,5 mg/kg

- End Use: Workers
- Exposure routes: Inhalation
- Potential health effects: Chronic effects
- Value: 275 mg/kg

PNEC

2-Methoxy-1-Methylethylacetate :

- Fresh Water
- Value: 0,635 mg/l

- Marine Water
- Value: 0,0635 mg/l

- Fresh Water sediment
- Value: 3,29 mg/kg

- Marine sediment
- Value: 0,329 mg/kg

- Soil
- Value: 0,29 mg/kg

8.2 Exposure controls

Engineering measures

- See chapter 7; no measures exceeding the ones mentioned are necessary.

Personal protective equipment

Respiratory protection:

- Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure.

Hand protection:

- Break through time: >10 min
- Glove thickness: > 0,4 mm
- For short-term exposure (splash protection):
- Nitrile rubber gloves.
- Remarks: These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also particular working conditions under which the gloves are being used.

Eye protection:

- tightly fitting safety glasses

Body protection:

- protective clothing

Hygiene measures:

- At work do not eat, drink, smoke or take drugs.
- Keep away from foodstuffs and beverages.
- Wash hands before breaks and after work.
- Use barrier skin cream.

Protective measures:

- Do not inhale vapours
- Avoid contact with eyes and skin.
- Observe the usual precautions for handling chemicals.

Environmental exposure controls

General advice:

- Do not allow entry to drains, water courses or soil

9. Physical and chemical properties

Appearance

- Form: liquid
- Colour: colourless
- Odour: ethereal

Safety data

- Flash point: 45 °C
- Ignition temperature: 315 °C
- Thermal decomposition: not determined
- Lower explosion limit: 1,5% (V)
- Upper explosion limit: 7% (V)
- Flammability (solid, gas): not determined
- Oxidizing properties: not determined
- Autoignition temperature: 272 °C
- Burning number: not determined
- Molecular weight: 132,16 g/mol
- pH: Note: Not Applicable
- Freezing point: not determined
- Boiling point: approx. 145 °C
- Sublimation point: not determined
- Vapour Pressure: approx. 5 hPa at 20 °C
- Density: 0.97 g/cm³ at 20°C

- Water solubility: approx. 200 g/l
- Partition coefficient:
n- octanol/ water: not determined
- Solubility in other solvents: not determined
- Viscosity, dynamic: 1 m Pas at 25 °C
- Viscosity, kinematic: not determined
- Relative vapour density: not determined
- Evaporation rate: not determined

10. Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions: Incompatible with oxidizing materials

10.4 Conditions to avoid

Conditions to avoid: Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid: Oxidizing agents
Strong acids
Bases

10.6 Hazardous decomposition products

Hazardous decomposition products: No decomposition if stored and applied as directed.

11. Toxicological information

11.1 Information on toxicological effects

Product:

Acute oral toxicity:
No data available.

Acute inhalation toxicity:
No data available.

Acute dermal toxicity:
No data available.

Skin corrosion/ irritation:
No data available.

Serious eye damage/ eye irritation:
No data available.

Respiratory or skin sensitization:
No data available.

Components

2-methoxy-1-methylethyl acetate

Acute oral toxicity: LD50: > 8.532 mg/kg, rat (female)

Acute inhalation toxicity: LC50:> 23 mg/l, rat

Acute dermal toxicity: LD50: > 5.000 mg/kg, rabbit

12. Ecological information

12.1 Toxicity

Product:

Toxicity to fish:

LC50: 100-180 mg/l, 96h,
Oncorhynchus mykiss

Toxicity to daphnia and other aquatic invertebrates:

No data available.

Toxicity to bacteria:

No data available.

Components:

2-methoxy-1-methylethyl acetate:

Toxicity to fish:

LC50: 100mg/l, 96h,
Oryzias latipes (Orange-red killifish)
Semi static test

Toxicity to daphnia and other aquatic invertebrates:

EC50: 373 mg/l, 48h
Daphnia magna (Water flea)

12.2 Persistence and degradability

Product:

Biodegradability:

The product is biodegradable.

Components:

2-methoxy-1-methylethyl acetate:

Biodegradability:

99%
Result: biodegradable.
Exposure time: 28 d

12.3 Bioaccumulative potential:

Product:

Bioaccumulation:

Bioaccumulation is unlikely.

Components:

2-methoxy-1-methylethyl acetate:

Bioaccumulation:

Bioaccumulation is unlikely.

12.4 Mobility in soil:

Components:

2-methoxy-1-methylethyl acetate:

Distribution among

environmental compartments:

Koc: 1,7, Highly mobile in soils

12.5 Results of PBT and vPvB assessment:

Product:

Assessment:

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very

bioaccumulating (vPvB).

Components:

2-methoxy-1-methylethyl acetate:

Assessment: The substance does not fulfill the PBT criteria., The substance does not fulfil the vPvB criteria.

12.6 Other adverse effects

Product:

Additional ecological information:

Do not allow product to reach the drainage.

13. Disposal considerations

Product:

- Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent Authorities.

Contaminated packaging:

- Packaging that cannot be cleaned should be disposed of as product waste.

14. Transport Information

ADR

- Substance No. UN 3272
- Description of the goods: Esters, n.o.s. (2-methoxy-1-methylethyl acetate)
- Class: 3
- Packing group: III
- Classification code: F1
- Risk no. : 30
- Labels: 3
- Environmentally hazardous: no

IATA

- UN No.: UN 3272
- Description of the goods: Esters, n.o.s. (2-methoxy-1-methylethyl acetate)
- Class: 3
- Packing group: III
- Labels: 3
- Environmentally hazardous: no
- Packing Instructions: PAX: 309 / 60 liter CAO: 310 / 220 liter

IMDG

- UN No.: UN 3272
- Description of the goods: Esters, n.o.s. (2-methoxy-1-methylethyl acetate)
- Class: 3
- Packing group: III
- Labels: 3
- Primary risk: 3
- EmS Number 1: F-E
- EmS Number 2: S-D
- Marine pollutant: no

RID

- UN-Number: UN 3272
- Description of the goods: Esters, n.o.s. (2-methoxy-1-methylethyl acetate)
- Class: 3
- Packing group: III
- Classification code: F1
- Risk No. : 30

- Labels: 3
- Environmentally hazardous: no

15. Regulatory Information

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

Candidate List of Substances of Very High Concern for Authorisation:

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

16. Other Information

Full text of R- phrases referred to under sections 2 and 3

- R10 Flammable.

Full text of H Statements referred to under sections 2 and 3

- H226 Flammable liquid and vapour.

Decimal notation: "Thousands" places are identified with a dot (example: 2.000 mg/kg means "two thousand mg/kg"). Decimal places are identified with a comma (example: 1,35 g/cm³)

Further information

- Contains: <0.5% 2-Methoxypropylacetate CAS-No. 70657-70-4. EC Classification: T, R 10-37-61

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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