

# SAFETY DATA SHEET

Revision Date 24-Dec-2021

Revision Number 4

## 1. Identification

**Product Name** 3,3-Dimethylpentane

**Cat No. :** AC152660000; AC152660010; AC152660050; AC152660250

**CAS No** 562-49-2  
**Synonyms** Heptane isomer.

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

### Details of the supplier of the safety data sheet

**Company**

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**Emergency Telephone Number** For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |            |
|--|------------|
| Flammable liquids                                | Category 2 |
| Skin Corrosion/Irritation                        | Category 2 |
| Serious Eye Damage/Eye Irritation                | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Central nervous system (CNS).    |            |
| Aspiration Toxicity                              | Category 1 |

**Label Elements****Signal Word**

Danger

**Hazard Statements**

Highly flammable liquid and vapor  
May be fatal if swallowed and enters airways

Causes skin irritation  
Causes serious eye irritation  
May cause drowsiness or dizziness



### Precautionary Statements

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell

#### Skin

If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do NOT induce vomiting

#### Fire

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

#### Storage

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

## 3. Composition/Information on Ingredients

| Component           | CAS No   | Weight % |
|---------------------|----------|----------|
| 3,3-Dimethylpentane | 562-49-2 | 99       |

## 4. First-aid measures

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

|  |   |
|--|---|
|  | medical attention.  |
| <b>Skin Contact</b>                        | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.  |
| <b>Inhalation</b>                          | Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention. Risk of serious damage to the lungs (by aspiration).       |
| <b>Ingestion</b>                           | Clean mouth with water. Get medical attention. Do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting occurs naturally, have victim lean forward. |
| <b>Most important symptoms and effects</b> | Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting  |
| <b>Notes to Physician</b>                  | Treat symptomatically   |

## 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>     | Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Water mist may be used to cool closed containers. Chemical foam. Water mist may be used to cool closed containers. |
| <b>Unsuitable Extinguishing Media</b>   | No information available  |
| <b>Flash Point</b>                      | -6 °C / 21.2 °F   |
| <b>Method -</b>                         | No information available  |
| <b>Autoignition Temperature</b>         | No information available  |
| <b>Explosion Limits</b>                 |   |
| <b>Upper</b>                            | 7.00%   |
| <b>Lower</b>                            | 1.00%   |
| <b>Sensitivity to Mechanical Impact</b> | No information available  |
| <b>Sensitivity to Static Discharge</b>  | No information available  |

### Specific Hazards Arising from the Chemical

Flammable. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air. Do not allow run-off from fire-fighting to enter drains or water courses.

### Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA

**Health**  
3

**Flammability**  
3

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

|   |  |
|---|--|
| <b>Personal Precautions</b>                 | Remove all sources of ignition. Take precautionary measures against static discharges.   |
| <b>Environmental Precautions</b>            | Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.  |
| <b>Methods for Containment and Clean Up</b> | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Provide adequate ventilation. Do not let this chemical enter the environment. Take precautionary measures against static discharges. |

## 7. Handling and storage

|                 |  |
|-----------------|--|
| <b>Handling</b> | Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Contents may develop pressure upon prolonged storage. Keep away from open flames, hot surfaces and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. |
| <b>Storage.</b> | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry and well-ventilated place. Incompatible Materials. Acids. Strong oxidizing agents.  |

## 8. Exposure controls / personal protection

### Exposure Guidelines

| Component           | ACGIH TLV                     | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA) |
|---------------------|-------------------------------|----------|------------|------------------|
| 3,3-Dimethylpentane | TWA: 400 ppm<br>STEL: 500 ppm |          |            |                  |

### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

|                             |   |
|-----------------------------|---|
| <b>Engineering Measures</b> | Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. |
|-----------------------------|---|

### Personal Protective Equipment

|                                 |   |
|---------------------------------|---|
| <b>Eye/face Protection</b>      | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. |
| <b>Skin and body protection</b> | Wear appropriate protective gloves and clothing to prevent skin exposure.   |
| <b>Respiratory Protection</b>   | No protective equipment is needed under normal use conditions.  |
| <b>Hygiene Measures</b>         | Handle in accordance with good industrial hygiene and safety practice.  |

## 9. Physical and chemical properties

|   |                             |
|---|-----------------------------|
| <b>Physical State</b>                         | Liquid                      |
| <b>Appearance</b>                             | Colorless                   |
| <b>Odor</b>                                   | No information available    |
| <b>Odor Threshold</b>                         | No information available    |
| <b>pH</b>                                     | No information available    |
| <b>Melting Point/Range</b>                    | -135 °C / -211 °F           |
| <b>Boiling Point/Range</b>                    | 86 °C / 186.8 °F @ 760 mmHg |
| <b>Flash Point</b>                            | -6 °C / 21.2 °F             |
| <b>Evaporation Rate</b>                       | No information available    |
| <b>Flammability (solid,gas)</b>               | Not applicable              |
| <b>Flammability or explosive limits</b>       |                             |
| Upper   | 7.00%                       |
| Lower   | 1.00%                       |
| <b>Vapor Pressure</b>                         | 191 mbar @ 37.7 °C          |
| <b>Vapor Density</b>                          | No information available    |
| <b>Specific Gravity</b>                       | 0.690                       |
| <b>Solubility</b>                             | No information available    |
| <b>Partition coefficient; n-octanol/water</b> | No data available           |
| <b>Autoignition Temperature</b>               | No information available    |

|                           |                          |
|---------------------------|--------------------------|
| Decomposition Temperature | No information available |
| Viscosity                 | No information available |
| Molecular Formula         | C7 H16                   |
| Molecular Weight          | 100.2                    |

## 10. Stability and reactivity

|                                  |  |
|----------------------------------|--|
| Reactive Hazard                  | None known, based on information available   |
| Stability                        | Stable under normal conditions.  |
| Conditions to Avoid              | Keep away from open flames, hot surfaces and sources of ignition. Incompatible products. |
| Incompatible Materials           | Acids, Strong oxidizing agents   |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )                                  |
| Hazardous Polymerization         | Hazardous polymerization does not occur.   |
| Hazardous Reactions              | None under normal processing.  |

## 11. Toxicological information

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

**Component Information**  
**Toxicologically Synergistic Products** No information available

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

|                 |  |
|-----------------|--|
| Irritation      | No information available   |
| Sensitization   | No information available   |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component           | CAS No   | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|---------------------|----------|------------|------------|------------|------------|------------|
| 3,3-Dimethylpentane | 562-49-2 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Central nervous system (CNS)

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

**Persistence and Degradability** Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its volatility.

### 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

**DOT**

UN-No UN1206  
Hazard Class 3  
Packing Group II

**TDG**

UN-No UN1206  
Hazard Class 3  
Packing Group II

**IATA**

UN-No UN1206  
Proper Shipping Name Heptanes  
Hazard Class 3  
Packing Group II

**IMDG/IMO**

UN-No UN1206  
Proper Shipping Name Heptanes  
Hazard Class 3  
Packing Group II

### 15. Regulatory information

**United States of America Inventory**

| Component           | CAS No   | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---------------------|----------|------|---|-----------------------------|
| 3,3-Dimethylpentane | 562-49-2 | X    | ACTIVE  | -                           |

**Legend:**

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component           | CAS No   | DSL | NDSL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|---------------------|----------|-----|------|-----------|-------|------|------|------|-------|----------|
| 3,3-Dimethylpentane | 562-49-2 | -   | X    | 209-230-8 | X     | X    | X    | -    | X     | KE-11735 |

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**U.S. Federal Regulations**

|   |   |
|---|---|
| <b>SARA 313</b>   | Not applicable  |
| <b>SARA 311/312 Hazard Categories</b>                       | See section 2 for more information                          |
| <b>CWA (Clean Water Act)</b>                                | Not applicable  |
| <b>Clean Air Act</b>  | Not applicable  |
| <b>OSHA - Occupational Safety and Health Administration</b> | Not applicable  |
| <b>CERCLA</b>   | Not applicable  |
| <b>California Proposition 65</b>                            | This product does not contain any Proposition 65 chemicals. |
| <b>U.S. State Right-to-Know Regulations</b>                 | Not applicable  |

**U.S. Department of Transportation**

|                             |   |
|-----------------------------|---|
| Reportable Quantity (RQ):   | N |
| DOT Marine Pollutant        | Y |
| DOT Severe Marine Pollutant | N |

|   |  |
|---|--|
| <b>U.S. Department of Homeland Security</b> | This product does not contain any DHS chemicals. |
|---|--|

**Other International Regulations**

|                       |                          |
|-----------------------|--------------------------|
| <b>Mexico - Grade</b> | No information available |
|-----------------------|--------------------------|

**Authorisation/Restrictions according to EU REACH**

| Component           | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---------------------|---|---|---|
| 3,3-Dimethylpentane | -   | Use restricted. See item 75. (see link for restriction details)               | -   |

<https://echa.europa.eu/substances-restricted-under-reach>

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

| Component           | CAS No   | OECD HPV       | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---------------------|----------|----------------|------------------------------|---------------------------|--|
| 3,3-Dimethylpentane | 562-49-2 | Not applicable | Not applicable               | Not applicable            | Not applicable                             |

| Component           | CAS No   | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|---------------------|----------|---|--|----------------------------|------------------------------------|
| 3,3-Dimethylpentane | 562-49-2 | Not applicable  | Not applicable   | Not applicable             | Not applicable                     |

**16. Other information**

**Prepared By** Regulatory Affairs

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**Revision Date**

24-Dec-2021

**Print Date**

24-Dec-2021

**Revision Summary**

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

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

**End of SDS**