



SAFETY DATA SHEET

Creation Date 07-Feb-2011

Revision Date 05-Dec-2011

Revision Number 2

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: Dimethyl methylphosphonate
Cat No. 116420000; 116420050; 116420250

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

E-mail address begeel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute Inhalation Toxicity - Vapors	Category 4
Serious Eye Damage/Eye Irritation	Category 2
Germ Cell Mutagenicity	Category 1B

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s) T - Toxic
R-phrases(s) R46 - May cause heritable genetic damage
R20 - Harmful by inhalation
R36 - Irritating to eyes

Dimethyl methylphosphonate

Revision Date 05-Dec-2011

SECTION 2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H340 - May cause genetic defects

Precautionary Statements - EU (§28, 1272/2008)

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 Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Dimethyl methylphosphonate 756-79-6	EEC No. 212-052-3	>95	756-79-6	Muta.Cat.2;R46 Xn;R20 Xi;R36	Acute Tox. 4 (H332) Eye Irrit. 2 (H319) Muta. 1B (H340)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES

Description of first aid measures

General Advice

If symptoms persist, call a physician Show this safety data sheet to the doctor in attendance

Dimethyl methylphosphonate

Revision Date 05-Dec-2011

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Protection of First-aiders Notes to Physician	Use personal protective equipment Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition. Risk of ignition. Combustible material.

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition.

Environmental precautions

Should not be released into the environment.

Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Dimethyl methylphosphonate

Revision Date 05-Dec-2011

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapors/dust. Do not ingest. Use only non-sparking tools. Take precautionary measures against static discharges. Keep away from open flames, hot surfaces and sources of ignition.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Component

Dimethyl methylphosphonate

Russia - TWA	Slovak Republic	Slovenia	Sweden	Turkey
MAC: 5 mg/m ³				

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls

Engineering Measures

Use only under a chemical fume hood Ensure that eyewash stations and safety showers are close to the workstation location

Personal protective equipment

Eye Protection

Safety glasses with side-shields

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

When using, do not eat, drink or smoke Provide regular cleaning of equipment, work area and clothing

Environmental exposure controls

No information available.

Dimethyl methylphosphonate

Revision Date 05-Dec-2011

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
pH	No information available.
Boiling Point/Range	181°C / 357.8°F
Melting Point/Range	No information available.
Flash Point	68°C / 154.4°F
Autoignition Temperature	No information available.
Specific Gravity	1.14
Molecular Formula	C3 H9 O3 P
Molecular Weight	124.08

SECTION 10. STABILITY AND REACTIVITY
Reactivity
Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	None under normal processing..

Conditions to Avoid

Incompatible products, Excess heat, Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials

Strong oxidizing agents, Strong bases.

Hazardous Decomposition Products

 Carbon monoxide (CO). Carbon dioxide (CO₂). Oxides of phosphorus.

SECTION 11. TOXICOLOGICAL INFORMATION
Information on Toxicological Effects
Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dimethyl methylphosphonate	8210 mg/kg (Rat)		>36100 mg/m ³ /1H (Rat)

Dimethyl methylphosphonate

Revision Date 05-Dec-2011

Chronic Toxicity**Carcinogenicity**

There are no known carcinogenic chemicals in this product

Sensitization

No information available.

Mutagenic Effects

May cause heritable genetic damage

Reproductive Effects

No information available.

Developmental Effects

No information available.

Target Organs

None known.

Other Adverse Effects

See actual entry in RTECS for complete information The toxicological properties have not been fully investigated.

Endocrine Disruptor Information

None known

SECTION 12. ECOLOGICAL INFORMATION**Toxicity****Ecotoxicity effects**

Do not empty into drains

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment**Other adverse effects**

No information available

SECTION 13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

Dimethyl methylphosphonate

Revision Date 05-Dec-2011

Contaminated Packaging Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO Not regulated

ADR Not regulated

IATA Not regulated

SECTION 15. REGULATORY INFORMATION

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

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Dimethyl methylphosphonate	212-052-3	-		X	X	-	X	X	X	X	X

Legend

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- CHINA** - China Inventory of Existing Chemical Substances
- AICS** - Inventory of Chemical Substances
- KECL** - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

SECTION 16. OTHER INFORMATION

- Full text of R-phrases referred to under sections 2 and 3**
R20 - Harmful by inhalation
R36 - Irritating to eyes
R46 - May cause heritable genetic damage

Dimethyl methylphosphonate

Revision Date 05-Dec-2011

SECTION 16. OTHER INFORMATION

Revision Date 05-Dec-2011

Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet