

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Mackstat DM

Recommended use of the chemical and restrictions on use

Recommended use : in Personal Care

Manufacturer or supplier's details

Company : Univar Solutions USA
Address : 3075 Highland Pkwy Suite 200
 Downers Grove, IL 60515
 United States of America (USA)

Emergency telephone number:

Transport North America: CHEMTREC (1-800-424-9300)

CHEMTREC INTERNATIONAL Tel # 703-527-3887

Additional Information: : Responsible Party: Product Compliance Department
 E-mail: SDSNA@univarsolutions.com
 SDS Requests: 1-855-429-2661
 Website: www.univarsolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 2

Skin sensitisation : Category 1

Carcinogenicity : Category 1B

GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H350 May cause cancer.

Precautionary statements : **Prevention:**
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

P308 + P313 IF exposed or concerned: Get medical advice/attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical name	Weight percent
6440-58-0	2,4-Imidazolidinedione, 1,3-bis(hydroxymethyl)-5,5-dimethyl-	50 - 70
50-00-0	Formaldehyde	1 - 3
67-56-1	Methanol	1 - 3

Any Concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not induce vomiting without medical advice.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Carbon dioxide (CO ₂) Water spray Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during fire-fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: No hazardous combustion products are known
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Conditions for safe storage	: Keep container tightly closed in a dry and well-ventilated

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Recommended storage temperature : 10 - 30 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
50-00-0	Formaldehyde	TWA	0.1 ppm	ACGIH
		STEL	0.3 ppm	ACGIH
		TWA	0.016 ppm	NIOSH REL
		C	0.1 ppm	NIOSH REL
		PEL	0.75 ppm	OSHA CARC
		STEL	2 ppm	OSHA CARC
		PEL	0.75 ppm	CAL PEL
		STEL	2 ppm	CAL PEL
		TWA	0.016 ppm (Formaldehyde)	NIOSH REL
		C	0.1 ppm (Formaldehyde)	NIOSH REL
67-56-1	Methanol	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m3	NIOSH REL
		ST	250 ppm 325 mg/m3	NIOSH REL
		TWA	200 ppm 260 mg/m3	OSHA Z-1
		STEL	250 ppm 325 mg/m3	OSHA P0
		TWA	200 ppm 260 mg/m3	OSHA P0
		C	1,000 ppm	CAL PEL
		PEL	200 ppm 260 mg/m3	CAL PEL
		STEL	250 ppm 325 mg/m3	CAL PEL

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
No personal respiratory protective equipment normally required.

Hand protection

Remarks : The suitability for a specific workplace should be discussed

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

Eye protection	:	with the producers of the protective gloves. Eye wash bottle with pure water Tightly fitting safety goggles
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	Clear, colorless
Odour	:	slight, formaldehyde-like
Odour Threshold	:	No data available
pH	:	6.5 - 7.5 @ 25 °C (77 °F)
Freezing Point (Melting point/freezing point)	:	-11 °C (12 °F)
Boiling Point (Boiling point/boiling range)	:	Calculated 100 °C (212 °F)
Flash point	:	> 100 °C (> 212 °F) Method: closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	20 mmHg @ 25 °C (77 °F)
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	1.155 g/cm ³ @ 20 °C (68 °F)
Solubility(ies)	:	
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Thermal decomposition	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Strong acids Strong bases Strong oxidizing agents

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute inhalation toxicity : Acute toxicity estimate: > 30000 ppm
Exposure time: 4 h
Test atmosphere: gas

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Components:

6440-58-0:

Acute oral toxicity : LD50 Oral (Rat, female): 1,750 mg/kg
Assessment: The component/mixture is moderately toxic after single ingestion.

50-00-0:

Acute oral toxicity : LD50 (Rat): 100 mg/kg
Assessment: The component/mixture is toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat, male and female): < 463 ppm
Exposure time: 4 h
Assessment: The component/mixture is toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rabbit): 300 mg/kg
Assessment: The component/mixture is toxic after single contact with skin.

67-56-1:

Acute oral toxicity : Assessment: The component/mixture is toxic after single ingestion.

Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term inhalation.
Remarks: Supporting toxicological evidence is limited for this classification. This harmonized classification will replace the indicated classification due to industry leaders and the EU Harmonized Classification (Annex VII).

Acute dermal toxicity : Assessment: The component/mixture is toxic after single contact with skin.

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

Skin corrosion/irritation

Components:

50-00-0:

Species: Rabbit

Result: Causes burns.

Serious eye damage/eye irritation

Components:

50-00-0:

Result: Risk of serious damage to eyes.

Remarks: No data available

Respiratory or skin sensitisation

Components:

50-00-0:

Test Type: lymph node assay

Species: Mouse

Result: The product is a skin sensitiser, sub-category 1A.

Germ cell mutagenicity

Components:

50-00-0:

Genotoxicity in vitro : Test Type: Ames test
Species: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: positive

Genotoxicity in vivo : Test Type: Chromosome aberration assay in vivo
Species: Mouse
Application Route: Intraperitoneal
Result: negative

Germ cell mutagenicity - Assessment : In vitro tests showed mutagenic effects which were not observed with in vivo test.

Carcinogenicity

Components:

50-00-0:

Species: Rat, (male and female)

Application Route: Oral

Exposure time: 104 wk

Dose: 10 - 1500mg/L

Frequency of Treatment: daily ad libitum

Result: evidence of carcinogenic activity

Carcinogenicity - Assessment : Possible human carcinogen

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

IARC	Group 1: Carcinogenic to humans	
	50-00-0	Formaldehyde
OSHA	OSHA specifically regulated carcinogen	
	50-00-0	Formaldehyde
NTP	Known to be human carcinogen	
	50-00-0	Formaldehyde

Reproductive toxicity

Components:

50-00-0:

Effects on foetal development

: Species: Rat
Application Route: Inhalation
Dose: 0, 2, 5, 10 ppm
Duration of Single Treatment: 9 d
Frequency of Treatment: 6 hr/day
General Toxicity Maternal: NOAEC: 5 ppm
Developmental Toxicity: NOAEC: 10 ppm
Result: No teratogenic effects

Reproductive toxicity - Assessment

Fertility classification not possible from current data.

Teratogenicity - Assessment

: Animal testing did not show any effects on foetal development.

STOT - single exposure

Components:

67-56-1:

Target Organs: Eyes, Central nervous system

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

6440-58-0:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 29.1 mg/l
Exposure time: 48 h
Test Type: semi-static test

Toxicity to algae : EC50 (Desmodesmus subspicatus): Calculated 7.9 mg/l
End point: Biomass
Exposure time: 72 h
Test Type: static test

Acute aquatic toxicity- Assessment : Toxic to aquatic life.

50-00-0:

Toxicity to fish : LC50 (Striped bass (Morone saxatilis)): 6.7 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 5.8 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 3.48 mg/l
End point: Biomass
Exposure time: 72 h
Test Type: static test

Acute aquatic toxicity- Assessment : Toxic to aquatic life.

Chronic aquatic toxicity- Assessment : Toxic to aquatic life with long lasting effects.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-637-7922
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation):

UN3082, Environmentally hazardous substances, liquid, n.o.s., (FORMALDEHYDE), 9, III

IATA (International Air Transport Association): Not regulated as a dangerous good

IMDG-Code: Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Formaldehyde	50-00-0	100	11111
Oxirane, 2-methyl- (Propylene oxide)	75-56-9	100	*
Benzene, (chloromethyl)-	100-44-7	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Formaldehyde	50-00-0	100	11111
Oxirane, 2-methyl- (Propylene oxide)	75-56-9	100	*
Benzene, (chloromethyl)-	100-44-7	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards

- : Skin corrosion or irritation
Respiratory or skin sensitisation
Carcinogenicity

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

50-00-0 Formaldehyde
50-00-0 Formaldehyde

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

50-00-0 Formaldehyde
75-56-9 Oxirane, 2-methyl- (Propylene oxide)
100-44-7 Benzene, (chloromethyl)-

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

50-00-0 Formaldehyde
75-56-9 Oxirane, 2-methyl- (Propylene oxide)
100-44-7 Benzene, (chloromethyl)-

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

50-00-0 Formaldehyde
67-56-1 Methanol

Pennsylvania Right To Know

6440-58-0 2,4-Imidazolidinedione, 1,3-bis(hydroxymethyl)-5,5-dimethyl-
7732-18-5 Water
50-00-0 Formaldehyde
67-56-1 Methanol

California Prop 65

⚠ WARNING: This product can expose you to chemicals including Formaldehyde, which is/are known to the State of California to cause cancer, and Methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

Safety Data Sheet Mackstat DM

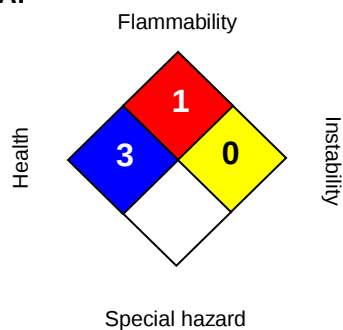
Version 1.3

Revision Date: 11/11/2023

AICS	: On the inventory, or in compliance with the inventory
NZIoC	: not determined
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: not determined
IECSC	: On the inventory, or in compliance with the inventory

SECTION16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 =Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

Revision Date : 11/11/2023

Legacy SDS: : 000000150746

Material number:
16051419, 16031307, 711176

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level

Safety Data Sheet

Mackstat DM

Version 1.3

Revision Date: 11/11/2023

DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		