acc. to OSHA, Appendix D to § 1910.1200

Mag Wheel

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name Mag Wheel

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

Relevant identified uses vehicle wheel cleaner

Uses advised against do not use for squirting or spraying

do not use for products which come into direct contact with

the skir

1.3 Details of the supplier of the safety data sheet

Auto Chem Systems 92-1358 Hunekai St Kapolei, HI 96707 808-672-8958

Competent person responsible for the SDS

Robert Blahnik

1.4 Emergency telephone number

Emergency information service USA 1.800.535.5053, INTL 1.352.323.3500

24 hour emergency telephone number.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Annex	 Hazard class and category 	- Haza	ard statement code(s)	
A.10	acute toxicity (oral)	Cat. 4	(Acute Tox. 4)	H302
A.2	skin corrosion/irritation	Cat. 1B	(Skin Corr. 1B)	H314
A.3	serious eye damage/eye irritation	Cat. 1	(Eye Dam. 1)	H318

Remarks

For full text of H-phrases: see SECTION 16.

Hazards not otherwise classified

Very toxic to aquatic life with long lasting effects (GHS category 1: aquatic toxicity - acute and chronic).

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Signal word danger

acc. to OSHA, Appendix D to § 1910.1200

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Pictograms

GHS05, GHS07



Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statements

Precautionary statements - prevention

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Precautionary statements - disposal

Dispose of contents/container to industrial combustion plant.

Hazardous ingredients for labelling

ammonium bifluoride

2.3 Other hazards

This material is combustible, but will not ignite readily.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Hazard class and category		Hazard state- ment
ammonium bifluoride	CAS No 1341-49-7	5 - < 10	A.10 A.2 A.3	Acute Tox. 3 Skin Corr. 1B Eye Dam. 1	H301 H314 H318
polyethoxylated tallow amine	CAS No 61791-26-2	1 - < 5	A.1O A.1D	Acute Tox. 4 Acute Tox. 4	H302 H312
disodium cocoamphodipropionate	CAS No 68604-71-7	1 - < 5	B.6	Flam. Liq. 4	H227
DPM	CAS No 34590-94-8	1 - < 5	B.6	Flam. Liq. 4	H227
polyoxyethylene 10 tridecyl ether	CAS No 78330-21-9	1 - < 5	A.1O	Acute Tox. 4	H302

acc. to OSHA, Appendix D to § 1910.1200

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Name of substance	Identifier	Wt%	Hazard o	class and category	Hazard state- ment
(Amines, N- tallowalkyltrimethylenediamines, ethoxylated	CAS No 61790-85-0	1 - < 5	A.10	Acute Tox. 4	H302

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Following eye contact

Irrigate copiously with clean, fresh water, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water, foam, alcohol resistant foam, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential. Explosive when mixed with combustible material.

Hazardous combustion products

nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

acc. to OSHA, Appendix D to § 1910.1200

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains. - Take up mechanically.

Advices on how to clean up a spill

Take up mechanically. Collect spillage (sawdust, kieselgur (diatomite), sand, universal binder).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

Reference to other sections

Hazardous combustion products: see section 5. Personal precautions: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

Warning

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Advice on general occupational hygiene

Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

Explosive atmospheres

Removal of dust deposits.

acc. to OSHA, Appendix D to § 1910.1200

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Incompatible substances or mixtures

Observe compatible storage of chemicals.

Control of the effects

Protect against external exposure, such as

frost

Consideration of other advice

Ventilation requirements

Use local and general ventilation.

Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Coun- try	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Source
US	dipropylene glycol methyl ether	34590-94-8	PEL	100	600			29 CFR OSHA
US	particulates not otherwise regulated (PNOR)		PEL		15			29 CFR OSHA
US	particulates not otherwise regulated (PNOR)		PEL		5			29 CFR OSHA

Notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless

otherwise specified.

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted

average.

Relevant DNELs/DMELs/PNECs and other threshold levels

No data available.

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

acc. to OSHA, Appendix D to § 1910.1200

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Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

hand protection

In the case of wanting to use the gloves again, clean them before taking off and air them well.

other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Particulate filter device (EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state solid

Color translucent - colorless to pale amber

Odor characteristic

Other physical and chemical parameters

pH (value)

Melting point/freezing point not determined

Initial boiling point and boiling range 100 °C

Flash point 62 °C (closed cup)

Evaporation rate not determined

Flammability (solid, gas)

Vapor pressure 31.69 hPa at 25 °C

Density 1.025 ⁹/_{ml}

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

n-octanol/water (log KOW)

This information is not available.

Auto-ignition temperature >150 °C

Viscosity not relevant (solid matter)

Explosive properties none
Oxidizing properties none

acc. to OSHA, Appendix D to § 1910.1200

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SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Physical stresses which might result in a hazardous situation and have to be avoided

strong shocks

10.5 Incompatible materials

There is no additional information.

Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Harmful if swallowed.

Acute toxicity estimate (ATE)

oral 1235

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	ATE
ammonium bifluoride	1341-49-7	oral	130
polyethoxylated tallow amine	61791-26-2	oral	1437
polyethoxylated tallow amine	61791-26-2	dermal	>1260
polyoxyethylene 10 tridecyl ether	78330-21-9	oral	2000
(Amines, N-tallowalkyltrimethylenediamines, ethoxylated	61790-85-0	oral	>500

acc. to OSHA, Appendix D to § 1910.1200

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Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Carcinogenicity

• National Toxicology Program (United States):

none of the ingredients are listed

IARC Monographs

Name of substance	Name acc. to inventory	CAS No	wt%	Classifica- tion	Remarks	Number
d-limonene	d-Limonene	5989-27-5	0.98	3		Volume 73

Legend

3

Not classifiable as to carcinogenicity in humans.

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
ammonium bifluoride	1341-49-7	LC50	421.4 ^{mg} / _I	fish	96 hours
polyethoxylated tallow amine	61791-26-2	LC50	0.19 ^{mg} / _l	fish	96 hours
polyethoxylated tallow amine	61791-26-2	LC50	0.99 ^{mg} / _l	fish	96 hours
polyethoxylated tallow amine	61791-26-2	EC50	0.008 ^{mg} / _l	algae	48 hours
polyethoxylated tallow amine	61791-26-2	EC50	0.47 ^{mg} / _l	daphnia	48 hours
DPM	34590-94-8	LC50	>150 ^{mg} / _I	fish	72 hours
DPM	34590-94-8	ErC50	>969 ^{mg} / _I	algae	72 hours

acc. to OSHA, Appendix D to § 1910.1200

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Name of substance	CAS No	Endpoint	Value	Species	Exposure time
polyoxyethylene 10 tridecyl ether	78330-21-9	LC50	5 ^{mg} / _l	fish	96 hours
polyoxyethylene 10 tridecyl ether	78330-21-9	EC50	5 ^{mg} / _I	daphnia	72 hours
polyoxyethylene 10 tridecyl ether	78330-21-9	EC50	5 ^{mg} / _I	algae	48 hours
(Amines, N- tallowalkyltrimethylenediam ines, ethoxylated	61790-85-0	LC50	0.1 ^{mg} / _l	fish	96 hours
(Amines, N- tallowalkyltrimethylenediam ines, ethoxylated	61790-85-0	LC50	0.15 ^{mg} / _l	fish	96 hours

12.2 Process of degradability

Data are not available.

Degradability of components of the mixture

begraduality of components of the mixture					
Name of substance	CAS No	Process	Degradation rate	Time	
DPM	34590-94-8	oxygen depletion	75 %	10 d	
DPM	34590-94-8	DOC removal	96 %	28 d	
DPM	34590-94-8	carbon dioxide generation	76 %	28 d	
(Amines, N- tallowalkyltrimethylenedia mines, ethoxylated	61790-85-0	biotic/abiotic	40 %	28 d	
(Amines, N- tallowalkyltrimethylenedia mines, ethoxylated	61790-85-0		40 %	218 d	

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
DPM	34590-94-8		0.0061	

12.4 Mobility in soil

Data are not available.

acc. to OSHA, Appendix D to § 1910.1200

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12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

13.3 Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

1/11	UN number	2922
14.1	ON Humber	2922

14.2 UN proper shipping name CORROSIVE LIQUID, TOXIC, N.O.S.

14.3 Transport hazard class(es)

Class 8 (corrosive substances)

Subsidiary risk(s) acute toxicity

14.4 Packing group II (substance presenting medium danger)

14.5 Environmental hazards none (non-environmentally hazardous acc. to the danger-

ous goods regulations)

14.6 Special precautions for user

There is no additional information.

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

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

• Transport of dangerous goods by road or rail (49 CFR US DOT)

Index number 2922

Proper shipping name Corrosive liquid, toxic, n.o.s.

Class 8
Packing group II

Danger label(s) 8+6.1

acc. to OSHA, Appendix D to § 1910.1200

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Special provisions (SP) B3, IB2, T7, TP2

ERG No 154

• International Maritime Dangerous Goods Code (IMDG)

UN number 2922

Proper shipping name CORROSIVE LIQUID, TOXIC, N.O.S.

Class 8
Subsidiary risk(s) 6.1
Packing group II

Danger label(s) 8+6.1



Special provisions (SP) 274
Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L

EmS F-A, S-B

Stowage category B

• International Civil Aviation Organization (ICAO-IATA/DGR)

UN number 2922

Proper shipping name Corrosive liquid, toxic, n.o.s.

Class 8
Subsidiary risk(s) 6.1
Packing group II
Danger label(s) 8+6.1



Special provisions (SP)

Excepted quantities (EQ)

Limited quantities (LQ)

A3

E2

0.5 L

acc. to OSHA, Appendix D to § 1910.1200

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

SARA TITLE III (Superfund Amendment and Reauthorization Act)

List of Extremely Hazardous Substances (40 CFR 355) (EPCRA Section none of the ingredients are listed 302 and 304)

Specific Toxic Chemical Listings (40 CFR 372) (EPCRA Section 313) none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System (American Coatings Association)

Category	Rating	Description
Chronic	/	None.
Health	3	Major injury likely unless prompt action is taken and medical treatment is given.
Flammability	2	Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
Physical hazard	0	Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.
Personal protective equipment	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States) - National Fire Protection Association (United States)

Category	Degree of hazard	Description
Flammability	2	Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
Health	3	Materials that, under emergency conditions, can cause serious or permanent injury.
Instability	0	Materials that are normally stable, even under fire conditions.
Special hazard		

Right to Know Hazardous Substance List

Name of substance	CAS No	Remarks	Classifications
ammonium bifluoride	1341-49-7		СО
DPM	34590-94-8		F2

Legend

CO Corrosive.

F2 Flammable - Second Degree.

Proposition 65 List of chemicals

none of the ingredients are listed

acc. to OSHA, Appendix D to § 1910.1200

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Relevant European Union (EU) safety, health and environmental provisions

Classification according to GHS (1272/2008/EC, CLP)

Hazard class Category Hazard class and category acute toxicity (oral) (Acute Tox. 4) 4 skin corrosion/irritation 1B (Skin Corr. 1B) (Eye Dam. 1) serious eye damage/eye irritation 1 hazardous to the aquatic environment - acute hazard (Aquatic Acute 1) 1 hazardous to the aquatic environment - chronic hazard 2 (Aquatic Chronic 2)

SECTION 16: Other information

16.2 Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR OSHA	29 CFR §1910.1001 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR § 40 U.S. Department of Transportation
Acute Tox.	acute toxicity
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
BCF	BioConcentration Factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	chemical oxygen demand
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EmS	Emergency Schedule
ERG No	Emergency Response Guidebook - Number
Eye Dam.	seriously damaging to the eye
Eye Irrit.	irritant to the eye
Flam. Liq.	flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC Monographs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
log KOW	n-octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant)

acc. to OSHA, Appendix D to § 1910.1200

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Abbr.	Descriptions of used abbreviations
NFPA® 704	National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States)
NPCA-HMIS®	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts per million
Skin Corr.	corrosive to skin
Skin Irrit.	irritant to skin
vPvB	very Persistent and very Bioaccumulative

16.3 Key literature references and sources for data

- OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200 49 CFR § 172.101 Hazardous Materials Table (DOT)

Classification procedure 16.4

Physical and chemical properties: The classification is based on tested mixture.

Health hazards/Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

16.5

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H227	combustible liquid
H301	toxic if swallowed
H302	harmful if swallowed
H312	harmful in contact with skin
H314	causes severe skin burns and eye damage
H318	causes serious eye damage

16.7 **Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.