Safety Data Sheet

according to the WHS Regulations

Issue date:25/05/2023 Revision date:07/02/2024 Supersedes:23/10/2023 Version: 2.1

SDS No: 00625-0086



SECTION 1: Product identifier

1.1. GHS Product identifier

Product form : Mixture
Product name : Care Tab

1.2. Other means of identification

Further information : Article number: 56.00.562; 56.01.527; 56.01.529

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Care product

For professional users only

1.4. Details of manufacturer or importer

Supplier Importer

RATIONAL AG COMCATER Pty. Ltd.

Siegfried-Meister-Straße 1 191 Salmon Street, Port Melbourne

86899 Landsberg am Lech Victoria 3207 Germany Australia

T +49 8191 327 387 - F +49 8191 327 231 T +61 (0) 3 8369 4600 - F +61 (0) 3 8369 4606

reinigung@rational-online.com - www.rational-online.com www.comcater.com.au

E-mail address of competent person responsible for the SDS: sds@gbk-ingelheim.de

1.5. Emergency phone number

Emergency number : Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

Country/Area	Organisation/Company	Address	Emergency number	Comment
Australia		Locked Bag 4001 NSW 2145 Westmead	13 11 26	

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1B H314
Serious eye damage/eye irritation, Category 1 H318
Specific target organ toxicity – Single exposure, Category 3, Respiratory H335

tract irritation

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)





Corrosion

Exclamation mark

Signal word (GHS AU) : Danger

Contains : DL-malic acid (20 - 50 %); citric acid (20 - 50 %); adipic acid (5 - 15 %)

Hazard statements (GHS AU) : H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

Safety Data Sheet

according to the WHS Regulations SDS No: 00625-0086

Precautionary statements (GHS AU)

: P101 - If medical advice is needed, have product container or label at hand.

P280 - Wear protective clothing, eye protection, face protection, protective gloves.

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

 ${\tt P305+P351+P338-IF\ IN\ EYES: Rinse\ cautiously\ with\ water\ for\ several\ minutes.\ Remove}$

contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a doctor, a POISON CENTER.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
DL-malic acid	617-48-1	20 - 50	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
citric acid	77-92-9	20 - 50	Eye Irrit. 2A, H319 STOT SE 3, H335
adipic acid	124-04-9	5 - 15	Eye Irrit. 2A, H319
Specific concentration limits:			

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Adhere to personal protective measures when giving first aid.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a

dester if you feel unwell

doctor if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a

physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. If the person is fully conscious, make him/her drink water. Never give an

unconscious person anything to drink. Do not induce vomiting. Call a physician immediately.

4.2. Symptoms caused by exposure

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Ingestion may cause nausea, vomiting and diarrhea. Burns.

4.3. Medical attention and special treatment

Treatment : If possible, show the doctor this safety data sheet. Failing this, show the doctor the

packaging or label.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

7/02/2024 (Revision date) AU - en 2/9

Safety Data Sheet

according to the WHS Regulations SDS No: 00625-0086

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Do not allow run-off from fire fighting to enter drains or water courses. Fire residues and

contaminated firefighting water must be disposed of in accordance with the local

regulations.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

Hazchem Code : 2

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not

breathe dust. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Storage temperature : $10 - 40 \, ^{\circ}\text{C}$

Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

Special rules on packaging : Keep only in original container.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

No additional information available

8.2. Biological Monitoring

No additional information available

8.3. Engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

7/02/2024 (Revision date) AU - en 3/9

Safety Data Sheet

according to the WHS Regulations SDS No: 00625-0086

8.4. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Type Material Permeation Thickness (mm) Penetration Standard

Chemically resistant protective gloves EN ISO 374

Eye protection : tightly fitting safety goggles

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Not required for normal conditions of use

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

Physical state : Solid
Appearance : tablet.
Colour : White
Odour : characteristic
Odour threshold : No data available

pH : 2.5 pH solution concentration : 1 %

Relative evaporation rate (butylacetate=1) : No data available

Melting point / Freezing point : Freezing point: Not applicable

Boiling point : No data available
Flash point : Not applicable
Auto-ignition temperature : Not applicable
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative density : No data available

Density : Density: $820 - 900 \text{ kg/m}^3$

Relative density: Not applicable

Solubility : Soluble in water.
Log Pow : No data available
Viscosity, kinematic : Not applicable
Explosive properties : No data available
Explosive limits : Not applicable
Minimum ignition energy : No data available

VOC content : < 3 %

Fat solubility : No data available

SECTION 10: Stability and reactivity

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reactions known under normal conditions of use.

Conditions to avoid : Protect from atmospheric moisture and water. Incompatible materials : Strong bases. Light metals. Oxidizing agent.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not

be produced.

SECTION 11: Toxicological information

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

7/02/2024 (Revision date) AU - en 4/9

Safety Data Sheet

according to the WHS Regulations SDS No: 00625-0086

DL-malic acid (617-48-1)	
LC50 Inhalation - Rat	> 1.306 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation))
citric acid (77-92-9)	
LD50 oral	5400 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:, 95% CL: 4500 - 6400
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
adipic acid (124-04-9)	
LD50 oral rat	5560 mg/kg
LC50 Inhalation - Rat	> 7.7 mg/l (4 h, (OECD 403 method)
Skin corrosion/irritation	: Causes severe skin burns.(OECD 431 method) pH: 2.5
Serious eye damage/irritation	: Causes serious eye damage.(OECD 438 method) pH: 2.5
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
DL-malic acid (617-48-1)	
NOAEL (oral, rat, 90 days)	≈ 600 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
citric acid (77-92-9)	
LOAEL (oral, rat, 90 days)	8000 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	4000 mg/kg bodyweight Animal: rat
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Ecotoxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short-term : Not classified (Based on available data, the classification criteria are not met)

(acute)

Hazardous to the aquatic environment, long-term : Not classified (Based on available data, the classification criteria are not met) (chronic)

DL-malic acid (617-48-1)			
LC50 fish 1	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)		
citric acid (77-92-9)			
LC50 fish 1	440 mg/l (48 h, Leuciscus idus (golden orfe), (OECD 203 method)		
EC50 Daphnia 1	1535 mg/l (24 h)		
adipic acid (124-04-9)			
EC50 Daphnia 1	46 mg/l 48 h, (OECD 202 method)		
ErC50 algae	59 mg/l Pseudokirchneriella subcapitata, (OECD 201 method)		
NOEC chronic crustacea	6.3 mg/l 48 h, (OECD 211 method)		

Safety Data Sheet

according to the WHS Regulations SDS No: 00625-0086

adipic acid (124-04-9))
------------------------	---

LC0, Danio rerio > 1000 mg/l (96 h, ECHA)

12.2. Persistence and degradability

Care Tab

Persistence and degradability Readily biodegradable,(OECD 301B method)

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)

Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

In accordance with ADG / IMDG / IATA

ADG	IMDG	IATA		
14.1. UN number				
3261	3261	3261		
14.2. UN Proper Shipping Name				
CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (citric acid; DL-malic acid; adipic acid)	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (citric acid; DL-malic acid; adipic acid)	Corrosive solid, acidic, organic, n.o.s. (citric acid; DL-malic acid; adipic acid)		
14.3. Transport hazard class(es)				
8	8	8		
8	8	8		
14.4. Packing group	14.4. Packing group			
II - Substances presenting medium danger	II	II		
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No		

14.6. Special precautions for user

Specific storage requirement : No data available Shock sensitivity : No data available

Safety Data Sheet

according to the WHS Regulations SDS No: 00625-0086

14.7. Additional information

Other information : No supplementary information available

Transport by road and rail

UN-No. (ADG) : 3261
Special provision (ADG) : 274
Limited quantities (ADG) : 1kg
Excepted quantities (ADG) : E2

Packing instructions (ADG) : P002, IBC08
Special packing provisions (ADG) : B2, B4
Portable tank and bulk container instructions (ADG) : T3
Portable tank and bulk container special provisions : TP33

(ADG)

Transport by sea

UN-No. (IMDG) : 3261 Special provisions (IMDG) : 274 Limited quantities (IMDG) : 1 kg Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P002 IBC packing instructions (IMDG) : IBC08 IBC special provisions (IMDG) B21, B4 Tank instructions (IMDG) Т3 Tank special provisions (IMDG) : TP33

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES

Stowage category (IMDG) : B

Segregation (IMDG) : SGG1, SG36, SG49

Air transport

UN-No. (IATA) : 3261 PCA Excepted quantities (IATA) : E2 : Y844 PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) : 5kg PCA packing instructions (IATA) : 859 PCA max net quantity (IATA) : 15kg CAO packing instructions (IATA) : 863 CAO max net quantity (IATA) : 50kg : A3, A803 Special provisions (IATA) ERG code (IATA) 8L

14.8. Hazchem or Emergency Action Code

Hazchem Code : 2X

SECTION 15: Regulatory information

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

No additional information available

15.2. International agreements

No additional information available

SECTION 16: Other information

Indication of changes			
Section	Changed item Change Comments		
1		Modified	

Safety Data Sheet

according to the WHS Regulations SDS No: 00625-0086

Revision date
Other information

: 7/02/2024

: Data of sections 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

Abbreviations and acr	onyms:
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number

Safety Data Sheet

according to the WHS Regulations SDS No: 00625-0086

Abbreviations and acronyms:		
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	
DOT	Department of Transport	
TDG	Transportation of Dangerous Goods	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals	
IBC-Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
MARPOL 73/78	MARPOL 73/78: International Convention for the Prevention of Pollution From Ships	
ADG	Transport of Australian Dangerous Goods	

Classification		
Skin Corr. 1B	H314	
Eye Dam. 1	H318	
STOT SE 3	H335	

Full text of H-statements		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A	
Skin Corr. 1B	Skin corrosion/irritation, Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	
H314	Causes severe skin burns and eye damage	
H315	Causes skin irritation	
H318	Causes serious eye damage	
H319	Causes serious eye irritation	
H335	May cause respiratory irritation	

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should therefore not be construed as guaranteeing any specific property of the product.