according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

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

1.1 Product identifier

Trade name : GREASE perfect 2x5 I

Identification number : 61218, 64246

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

Use of the Substance/Mixture : Cleaning agent

Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : tana Chemie GmbH

Rheinallee 96 55120 Mainz +49613196403

Telephone : +49613196403 Telefax : +4961319642414

E-mail address : Produktsicherheit@werner-mertz.com

Responsible/issuing person

Contact person : Product development / product safety

1.4 Emergency telephone number

+49(0)6131-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2 H319: Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.

Precautionary statements : P102 Keep out of reach of children.

Prevention:

P260 Do not breathe spray.

P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face



WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for

several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

Disposal:

P501 Dispose of contents/ container to an approved

waste disposal plant.

Safety data sheet available on request.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Aqueous surfactant solution.

Hazardous components

CAS-No. EC-No.	Classification	Concentration (% w/w)
Registration number		
105-59-9 203-312-7	Eye Irrit. 2; H319	>= 2 - < 5
27252-75-1	Eye Dam. 1; H318	>= 2 - < 3
64-17-5 200-578-6 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319 SCL >= 50 % 2; H319	>= 1 - < 2
	EC-No. Registration number 105-59-9 203-312-7 27252-75-1	EC-No. Registration number 105-59-9 203-312-7 Eye Irrit. 2; H319 27252-75-1 Eye Dam. 1; H318 64-17-5 200-578-6 01-2119457610-43 SCL

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.



WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

If inhaled Move to fresh air.

If symptoms persist, call a physician.

In case of skin contact Take off contaminated clothing and shoes immediately.

> Wash off with soap and plenty of water. If symptoms persist, call a physician.

In case of eye contact : Protect unharmed eye.

If easy to do, remove contact lens, if worn.

Rinse immediately with plenty of water, also under the eyelids, for at

least 15 minutes.

If eye irritation persists, consult a specialist.

If swallowed Clean mouth with water and drink afterwards plenty of water.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Irritation

Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : For specialist advice physicians should contact the Poisons

Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

firefighters

Special protective equipment for : In the event of fire, wear self-contained breathing apparatus.

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.

according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Neutralise with acid.

Soak up with inert absorbent material (e.g. sand, silica gel, acid

binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8., Treat recovered material as described in the section "Disposal considerations"., Refer to section 15 for specific national regulation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes. For personal protection see section

8. Smoking, eating and drinking should be prohibited in the

application area.

Advice on protection against fire

and explosion

: Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas

and containers

: Store in original container. Keep container tightly closed in a dry and

well-ventilated place. Store at room temperature in the original

container.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Cleaning agent

according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL

2,2'-methyliminodiethanol

105-59-9:

: End Use: Workers

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 26 mg/m3

End Use: Workers Exposure routes: Dermal

Potential health effects: Long-term systemic effects

Value: 19 mg/kg

ethanol : End Use: Workers

64-17-5: Exposure routes: Inhalation

Potential health effects: Acute local effects

Value: 1900 mg/m3

End Use: Workers

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 950 mg/m3

End Use: Workers

Exposure routes: Skin contact

Potential health effects: Long-term systemic effects

Value: 343 mg/kg

End Use: Consumers Exposure routes: Inhalation

Potential health effects: Acute local effects

Value: 950 mg/m3

End Use: Consumers

Exposure routes: Skin contact

Potential health effects: Long-term systemic effects

Value: 206 mg/kg

End Use: Consumers Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 114 mg/m3

End Use: Consumers
Exposure routes: Ingestion

Potential health effects: Long-term systemic effects

Value: 87 mg/kg

according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

End Use: Consumers

Exposure routes: Skin contact

Potential health effects: Acute local effects

Value: 950 mg/m3

PNEC

2,2'-methyliminodiethanol

105-59-9:

: Fresh water

Value: 1 mg/l

Marine water

Value: 0,0045 mg/l

intermittent release Value: 1 mg/l

J

Fresh water sediment Value: 0,78 mg/kg

Marine sediment

Value: 0,0351 mg/kg

Soil

Value: 0,097 mg/kg

STP

Value: 10 mg/l

ethanol : Fresh water

64-17-5: Value: 0,96 mg/l

Marine water Value: 0,79 mg/l

Fresh water sediment Value: 3,6 mg/kg

Soil

Value: 0,63 mg/kg

STP

Value: 580 mg/l

intermittent release Value: 2,75 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : If splashes are likely to occur, wear:

Tightly fitting safety goggles

according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

Hand protection

Material : For prolonged or repeated contact use protective gloves.

Chemical resistant gloves made of butyl rubber or nitrile rubber

category III according to EN 374-1: 2003 (0,4 mm).

Remarks : Take note of the information given by the producer concerning

permeability and break through times, and of special workplace

conditions (mechanical strain, duration of contact).

Skin and body protection : not required under normal use

Respiratory protection : Not required; except in case of aerosol formation.

Recommended Filter type:

ABEK-P3-filter

Environmental exposure controls

General advice : Try to prevent the material from entering drains or water courses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : yellow

Odour : characteristic
Odour Threshold : No data available

pH : ca. 11,2, at20 °C

Melting point/range : No data available
Boiling point/boiling range : No data available
Flash point : Not applicable
Evaporation rate : No data available
Flammability (solid, gas) : No data available

Burning rate : No data available
Lower explosion limit : No data available
Upper explosion limit : No data available

Vapour pressure : No data available
Relative vapour density : No data available

Relative density : No data available



WM 0712574 Order number: 0712574

 Version 4.1
 Revision Date 27.07.2018
 Print Date 31.07.2019

Density : ca. 1,010 g/cm3 at 20 °C

Water solubility : soluble

Solubility in other solvents : No data available
Partition coefficient: n- : No data available

octanol/water

Ignition temperature : No data available
Thermal decomposition : No data available
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions., No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions., No decomposition if

used as directed.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

Hazardous decomposition : No hazardous decomposition products are known.

products

Other information : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

Product

Skin corrosion/irritation : According to the classification criteria of the European Union, the

product is not considered as being a skin irritant.

Serious eye damage/eye

irritation

: According to the classification criteria of the European Union, the

product is not considered as being an eye irritant.

Respiratory or skin sensitisation : No data available

Further information : No data available

Components:

Octan-1-ol, ethoxylated (4 EO)

27252-75-1:

Acute oral toxicity : LD50 Oral : > 2.000 mg/kg

ethanol 64-17-5:

Acute oral toxicity : LD50 Oral Rat: 10.470 mg/kg

Method: OECD Test Guideline 401

LD50 Rat: 5.000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 Rat: 51 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal Rabbit: > 2.000 mg/kg

Method: OECD Test Guideline 402

LD50 Dermal Rabbit: > 10.000 mg/kg Method: OECD Test Guideline 402

Skin corrosion/irritation : Species: Rabbit

Result: No skin irritation

Method: OECD Test Guideline 404

Serious eye damage/eye

irritation

Species: Rabbit

Result: Mild eye irritation

Method: OECD Test Guideline 405

Respiratory or skin sensitisation : Species: Mouse

Result: Does not cause skin sensitisation.

Method: see user defined free text

according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

Reproductive toxicity : Species: Rat

Application Route: Oral NOAEL: 5.200 mg/kg

Species: Rat

Application Route: Oral NOAEL: 13.800 mg/kg

Species: Rat

Application Route: Inhalation NOAEL: 30400 mg/m3

Repeated dose toxicity : Rat, male: NOAEL: > 20 mg/kg

Method: OECD Test Guideline 403

Rat, female: NOAEL: 1.730 mg/kg

Method: OECD Test Guideline 408

SECTION 12: Ecological information

12.1 Toxicity

Components:

Octan-1-ol, ethoxylated (4 EO)

27252-75-1:

Toxicity to fish : LC50 (Fish): 10 - 100 mg/l

Test Type: semi-static test Method: ISO 7346/2

Toxicity to bacteria : (Bacteria): > 100 mg/l

Method: OECD Test Guideline 209

ethanol 64-17-5:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 13 g/l

Exposure time: 96 h

Method: OECD Test Guideline 203

LC50 (Leuciscus idus (Golden orfe)): 8.150 mg/l

Exposure time: 48 h

LC50 (Pimephales promelas (fathead minnow)): > 0,1 g/l

Exposure time: 96 h

LC50 (Fish): 11.200 mg/l

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 12.340 mg/l

Exposure time: 48 h



WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

EC50: 5.012 mg/l

Toxicity to algae : EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l

Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

EC50 (Scenedesmus capricornutum (fresh water algae)): 12.900

mg/l

Exposure time: 48 h Test Type: Growth inhibition Method: No information available.

EC0 (Scenedesmus quadricauda (Green algae)): 5.000 mg/l

Exposure time: 168 h

EC50: 4.432 mg/l

EC10: 11,5 mg/l

EC10: 280 mg/l

Toxicity to bacteria : EC50 (Pseudomonas putida): 11.800 mg/l

Exposure time: 16 h

Test Type: Cell multiplication inhibition test

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: The surfactant(s) contained in this preparation complies

(comply) with the biodegradability criteria as laid down in Regulation

(EC) No. 648/2004 on detergents.

Components:

ethanol 64-17-5:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 97 %

Method: OECD Test Guideline 301

12.3 Bioaccumulative potential

Components:

ethanol 64-17-5:

Bioaccumulation : Concentration: 3,2 mg/l

Partition coefficient: n-

octanol/water

: log Pow: -0,32

12.4 Mobility in soil

Components:



WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

ethanol 64-17-5:

Distribution among : Koc: 1Remarks: Highly mobile in soils

environmental compartments

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be

either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : There is no data available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with chemical or

used container.

Offer surplus and non-recyclable solutions to a licensed disposal

company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

Waste Code European Waste Catalogue

200129

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste

disposal authorities.

SECTION 14: Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class

ADR

according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not regulated as a dangerous good

IATA

Not dangerous goods

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

For personal protection see section 8.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Not applicable

Regulation (EC) No 649/2012 of the European Parliament and

the Council concerning the export and import of dangerous

chemicals

REACH - Restrictions on the manufacture, placing on the

market and use of certain dangerous substances, preparations

and articles (Annex XVII)

Directive 96/82/EC does not apply

Seveso III: Directive 2012/18/EU of the European Parliament and of

of the European Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

TA Luft List (Germany) : Total dust: Not applicable

: Inorganic substances in powdered form: Not applicable

: Inorganic substances in vapour or gaseous form: : portionClass 3:

: Not applicable

: Not applicable

0,01 %

: Organic Substances: Not applicable

13 / 15

according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

Carcinogenic substances: : portionClass 2: < 0,01 %

Mutagenic: : < 0,01 %

Toxic to reproduction: Not applicable

Volatile organic compounds

(VOC) content

Percent volatile: 1,94 %

193,55 q/l

VOC content excluding water

Volatile organic compounds

(VOC) content

: Percent volatile: 1,94 %

19,61 g/l

VOC content valid only for coating materials used on wood surfaces

according to Detergents

Regulation EC 648/2004

: <5% Anionic surfactants, Non-ionic surfactants

GISBAU (D) : GU 80

15.2 Chemical safety assessment

There is no data available for this product.

SECTION 16: Other information

Full text of H-Statements

H225 Highly flammable liquid and vapour. H318 Causes serious eye damage. Causes serious eye irritation. H319

Further information

Classification procedure: H319 Calculation method

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: AICS -Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL -International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC -No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No

according to Regulation (EC) No. 1907/2006



GREASE perfect 2x5 I

WM 0712574 Order number: 0712574

Version 4.1 Revision Date 27.07.2018 Print Date 31.07.2019

Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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.

500000002568