SAFETY DATA SHEET

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

1.1. Product identifier

Trade name
Graffiti Remover 21 Gel

Product no.
-

REACH registration number
Not applicable

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

Relevant identified uses of the substance or mixture
Graffiti Removal

Uses advised against
-
The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address
Blue & Green AB
Stenorsvägen 52
261 44 Landskrona
Sweden
Tfn: +46 418 399000
Fax: +46 418 13199
www.blueandgreen.se

E-mail
info@blueandgreen.se

SDS date
2020-09-14

SDS Version
1.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Irrit. 2; H315
Eye Irrit. 2; H319
See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)

Signal word
Warning

Hazard statement(s)
Causes skin irritation. (H315)
Causes serious eye irritation. (H319)

Precautionary statements

General	If medical advice is needed, have product container or label at hand. (P101). Keep out of reach of children. (P102).
Prevention	Wash hands/exposed skin thoroughly after handling. (P264). Wear eye protection/gloves. (P280).
Response	If eye irritation persists: Get medical advice/attention. (P337+P313). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).
Storage	-
Disposal	-

Identity of the substances primarily responsible for the major health hazards

Not applicable

Additional labelling

Not applicable

Unique formula identifier (UFI)

D0H5-9P5J-H909-6MFY

2.3. Other hazards

Not applicable

Additional warnings

Not applicable

VOC (volatile organic compound)

Not applicable

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME:	dimethyl glutarate
IDENTIFICATION NOS.:	CAS-no: 1119-40-0 EC-no: 214-277-2 REACH-no: 01-2119900156-49
CONTENT:	40-60%
CLP CLASSIFICATION:	NA

NAME:	dimethyl succinate
IDENTIFICATION NOS.:	CAS-no: 106-65-0 EC-no: 203-419-9 REACH-no: 01-2119486681-29
CONTENT:	15 - <25%
CLP CLASSIFICATION:	NA

NAME:	2-butoxyethanol
IDENTIFICATION NOS.:	CAS-no: 111-76-2 EC-no: 203-905-0 REACH-no: 01-2119475108-36 Index-no: 603-014-00-0
CONTENT:	15 - <25%
CLP CLASSIFICATION:	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2 H302, H312, H315, H319, H332
NOTE:	O L

NAME:	dimethyl adipate
IDENTIFICATION NOS.:	CAS-no: 627-93-0 EC-no: 211-020-6 REACH-no: 01-2119911093-50
CONTENT:	5 - <10%
CLP CLASSIFICATION:	NA

NAME:	2,2',2''-nitrilotriethanol
IDENTIFICATION NOS.:	CAS-no: 102-71-6 EC-no: 203-049-8 REACH-no: 01-2119486482-31
CONTENT:	2.5 - <5%
CLP CLASSIFICATION:	NA
NOTE:	O

NAME:	Hydroxipropylmetylcellulosa
IDENTIFICATION NOS.:	CAS-no: 9004-65-3
CONTENT:	1 - <2.5%
CLP CLASSIFICATION:	NA

(*) O = Organic solvent L = European occupational exposure limit. See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

ATEmix(inhale, vapour) > 20
ATEmix(dermal) > 2000
ATEmix(oral) > 2000
Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 1.2 - 1.8
Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 1.2 - 1.8

Detergent:

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service: Dial 0344 892 0111 (24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water.

Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under the upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Not applicable

4.2. Most important symptoms and effects, both acute and delayed

This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned: Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Nitrogen oxides. Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No specific requirements.

6.2. Environmental precautions

No specific requirements.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms.
See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature

Room temperature 18 to 23°C

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

2-butoxyethanol
Long-term exposure limit (8-hour TWA reference period): 25 ppm | 123 mg/m³
Short-term exposure limit (15-minute reference period): 50 ppm | - mg/m³
Comments: Sk;BMGV (Bmgv = Biological Monitoring Guidance Value. Sk = Can be absorbed through skin.)

DNEL / PNEC

DNEL (dimethyl succinate): 1,1mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - Workers

DNEL (dimethyl succinate): 6.8mg/kg/d
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (dimethyl succinate): 33,5mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (dimethyl succinate): 1,1mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - Workers

DNEL (dimethyl succinate): 12,6mg/kg
Exposure: Dermal
Duration of Exposure: Short term – Systemic effects - Workers

DNEL (dimethyl succinate): 67mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Systemic effects - Workers

DNEL (dimethyl glutarate): 8,3mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - Workers

DNEL (dimethyl glutarate): 49,8mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - Workers

DNEL (dimethyl glutarate): 5mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - General population

DNEL (dimethyl glutarate): 50mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - General population

DNEL (2-butoxyethanol): 3.2 mg/kg bw/day
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-butoxyethanol): 49 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-butoxyethanol): 38 mg/kg bw/day
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-butoxyethanol): 426 mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Systemic effects - General population

DNEL (2-butoxyethanol): 123 mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - General population

DNEL (2-butoxyethanol): 98 mg/m3, 20 ppm
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (2-butoxyethanol): 246 mg/m3, 50 ppm
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - Workers

DNEL (2-butoxyethanol): 663 mg/m3, 135 ppm
Exposure: Inhalation
Duration of Exposure: Short term – Systemic effects - Workers

DNEL (2-butoxyethanol): 89 mg/kg bw/day
Exposure: Dermal
Duration of Exposure: Short term – Systemic effects - Workers

DNEL (2-butoxyethanol): 13.4 mg/kg bw/day
Exposure: Oral
Duration of Exposure: Short term – Systemic effects - General population

DNEL (2-butoxyethanol): 44.5 mg/kg bw/day
Exposure: Dermal
Duration of Exposure: Short term – Systemic effects - General population

PNEC (dimethyl succinate): 0,05mg/l
Exposure: Freshwater

PNEC (dimethyl succinate): 0,005mg/l
Exposure: Marine water

PNEC (dimethyl succinate): 0,5mg/l
Exposure: Intermittent release

PNEC (dimethyl succinate): 10mg/l
Exposure: Sewage Treatment Plant

PNEC (dimethyl succinate): 0,137mg/kg
Exposure: Freshwater sediment

PNEC (dimethyl succinate): 0,014mg/kg
Exposure: Marine water sediment

PNEC (dimethyl adipate): 0,018mg/l
Exposure: Freshwater

PNEC (dimethyl adipate): 0,0018mg/l
Exposure: Marine water

PNEC (dimethyl adipate): 0,18mg/l
Exposure: Intermittent release

PNEC (dimethyl adipate): 0,16mg/kg
Exposure: Freshwater sediment

PNEC (dimethyl adipate): 0,016
Exposure: Marine water sediment

PNEC (dimethyl adipate): 0,09mg/kg
Exposure: Soil

PNEC (dimethyl adipate): 10mg/l
Exposure: Sewage Treatment Plant

PNEC (dimethyl glutarate): 0,018mg/l
Exposure: Freshwater

PNEC (dimethyl glutarate): 0,0018/mg/l
Exposure: Marine water

PNEC (dimethyl glutarate): 0,018/mg/l
Exposure: Intermittent release

PNEC (dimethyl glutarate): 0,16mg/kg
Exposure: Freshwater sediment

PNEC (dimethyl glutarate): 0,016mg/kg
Exposure: Marine water sediment

PNEC (dimethyl glutarate): 0,09mg/kg
Exposure: Soil

PNEC (dimethyl glutarate): 10mg/l
Exposure: Sewage Treatment Plant

PNEC (2-butoxyethanol): 8.8 mg/l
Exposure: Freshwater

PNEC (2-butoxyethanol): 0.88 mg/l
Exposure: Marine water

PNEC (2-butoxyethanol): 463 mg/l
Exposure: Sewage Treatment Plant

PNEC (2-butoxyethanol): 34.6 mg/kg dw
Exposure: Freshwater sediment

PNEC (2-butoxyethanol): 3.46 mg/kg dw
Exposure: Marine water sediment

PNEC (2-butoxyethanol): 2.8 mg/kg dw
Exposure: Soil

PNEC (2-butoxyethanol): 9.1 mg/l
Exposure: Intermittent release

8.2. Exposure controls

Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

There is no appendix to this safety data sheet.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally
Use only CE marked protective equipment.

Respiratory Equipment
NA

Skin protection
Dedicated work clothing should be worn.

Hand protection
Butyl rubber
Breakthrough time: > 480 minutes (Class 6)

Eye protection
Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Gel
Colour	Yellowish
Odour	Mild
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm³)	1.05
Phase changes	
Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.
Data on fire and explosion hazards	
Flash point (°C)	97
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.
Solubility	
Solubility in water	Soluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available

10.2. Chemical stability
The product is stable under the conditions, noted in the section “Handling and storage”.

10.3. Possibility of hazardous reactions
Nothing special

10.4. Conditions to avoid
Nothing special

10.5. Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products
The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
Substance: Hydroxipropylmetylcellulosa
Species: Rat
Test: LD50

Route of exposure: Oral
Result: >2000mg/kg

Substance: 2,2',2''-nitrilotriethanol
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 6400mg/kg

Substance: 2,2',2''-nitrilotriethanol
Species: Rabbit
Test: LD50
Route of exposure: Dermal
Result: >2000mg/kg

Substance: dimethyl adipate
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 5000mg/kg

Substance: dimethyl adipate
Species: Rat
Test: LD50
Route of exposure: Dermal
Result: 2000mg/kg

Substance: dimethyl adipate
Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: 11000mg/l

Substance: 2-butoxyethanol
Species: Guinea pig
Test: LD50
Route of exposure: Oral
Result: 1414 mg/kg

Substance: 2-butoxyethanol
Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: 2.56 mg/l/4h

Substance: 2-butoxyethanol
Species: Guinea pig
Test: LD0
Route of exposure: Dermal
Result: >2000 mg/kg

Substance: 2-butoxyethanol
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 1300 mg/kg

Substance: dimethyl succinate
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 5000mg/kg

Substance: dimethyl succinate
Species: Rat
Test: LD50
Route of exposure: Dermal
Result: 2000mg/kg

Substance: dimethyl succinate
Species: Rat
Test: LC50
Route of exposure: Inhalation

Result: 11000mg/l

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/irritation
Causes serious eye irritation.

Respiratory or skin sensitisation
No data available.

Germ cell mutagenicity
No data available.

Carcinogenicity
No data available.

Reproductive toxicity
No data available.

STOT-single exposure
No data available.

STOT-repeated exposure
No data available.

Aspiration hazard
No data available.

Long term effects
This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance: 2,2',2''-nitrilotriethanol
Species: Fish
Test: LC50
Duration: 96h
Result: 450-1000mg/l

Substance: 2,2',2''-nitrilotriethanol
Species: Daphnia
Test: EC50
Duration: 48h
Result: >2500mg/l

Substance: 2,2',2''-nitrilotriethanol
Species: Algae
Test: IC50
Duration: 72h
Result: 216mg/l

Substance: 2,2',2''-nitrilotriethanol
Species: Daphnia
Test: EC50
Duration: 24h
Result: 1390mg/l

Substance: 2,2',2''-nitrilotriethanol
Species: Daphnia
Test: NOEC
Duration: 21d
Result: 16mg/l

Substance: dimethyl adipate
Species: Fish
Test: LC50
Duration: 96h
Result: 18-24mg/l

Substance: dimethyl adipate
Species: Daphnia
Test: EC50
Duration: 48h
Result: 112-150mg/l

Substance: dimethyl adipate
Species: Algae
Test: EC50
Duration: 72h
Result: >85mg/l

Substance: 2-butoxyethanol
Species: Algae
Test: EC50
Duration: 72h
Result: 1840 mg/l

Substance: 2-butoxyethanol
Species: Fish
Test: LC50
Duration: 96h
Result: 1474 mg/l

Substance: 2-butoxyethanol
Species: Daphnia
Test: EC50
Duration: 48h
Result: 1550 mg/l

Substance: 2-butoxyethanol
Species: Fish
Test: NOEC
Duration: 21d
Result: 100 mg/l

Substance: 2-butoxyethanol
Species: Daphnia
Test: NOEC
Duration: 21d
Result: 100 mg/l

Substance: dimethyl succinate
Species: Fish
Test: LC50
Duration: 96h
Result: 12-24mg/l

Substance: dimethyl succinate
Species: Daphnia
Test: EC50
Duration: 48h
Result: 112-150mg/l

Substance: dimethyl succinate
Species: Algae
Test: EC50
Duration: 72h
Result: >85mg/l

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
2,2',2''-nitrilotriethanol	Yes	DOC Die-Away Test	97%
dimethyl adipate	Yes	No data available	No data available
2-butoxyethanol	Yes	CO2 Evolution Test	90,4
dimethyl succinate	Yes	No data available	No data available
dimethyl glutarate	Yes	No data available	No data available

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
2,2',2''-nitrilotriethanol	No	-2.3	No data available
2-butoxyethanol	No	0.81	No data available

12.4. Mobility in soil

2,2',2''-nitrilotriethanol: Log Koc= -1.74297, Calculated from LogPow ().
2-butoxyethanol: Log Koc= 0.719839, Calculated from LogPow (High mobility potential.).

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

Nothing special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is not covered by regulations on dangerous waste.

Waste
EWC code
-

Specific labelling
Not applicable

Contaminated packing
Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4
Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

14.1. UN number	-
14.2. UN proper shipping name	-
14.3. Transport hazard class(es)	-
14.4. Packing group	-
Notes	-
Tunnel restriction code	-

IMDG

UN-no.	-
Proper Shipping Name	-
Class	-
PG*	-
EmS	-
MP**	-
Hazardous constituent	-

IATA/ICAO

UN-no.	-
Proper Shipping Name	-
Class	-
PG*	-

14.5. Environmental hazards
-

14.6. Special precautions for user
-

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No data available

(*) Packing group
(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application
People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education
-

Additional information
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Seveso
-

Biocidal reg. no.
Not applicable

Sources
Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and

health at work of pregnant workers and workers who have recently given birth or are breastfeeding.
Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.
Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).
Regulation (EC) 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H302 - Harmful if swallowed.
H312 - Harmful in contact with skin.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.

The full text of identified uses as mentioned in section 1

-

Additional label elements

Not applicable

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:
The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

David Löwenstein

Date of last essential change (First cipher in SDS version)

-

Date of last minor change (Last cipher in SDS version)

-