

SAFETY DATA SHEET

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

1.1. Product identifier

Product name: GRACEMATE POPPY/GARDENIA

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

Identified uses: Air freshener
Uses advised against: No information

1.3. Details of the supplier of the safety data sheet

Name of supplier (importer): TRUCK SHOP B.V.
Department in Charge Michel Zuurdeeg
Address De Corridor 12 E 3621 ZB Breukelen Netherlands
Telephone number +31-346-284848
Fax number
e-mail address michel@truck-shop.nl

Name of manufacturer in Japan: DIA CHEMICAL CO., LTD.
Department in Charge
Address 2-20-13, Midorigaoka, Toyonaka-shi, Osaka, 560-0002 Japan
Telephone number +81-6-6846-3735
Fax number +81-6-6846-3731
e-mail address

1.4. Emergency telephone number

+81-6-6846-3735

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with EC No 1272/2008:

Flam. Liq. 2: H225
Skin Sens. 1: H317
Eye Irrit. 2: H319
STOT SE 3: H335
STOT SE 3: H336
Carc. 1: H350
Repr. 1: H360
Lact. : H362
STOT SE 2: H371
STOT RE 1: H372
STOT RE 2: H373
Aquatic Chronic 3: H412

2.2. Label elements

In accordance with EC No 1272/2008:

Pictogram



Signal word

Danger

Hazard Statements

H225: Highly flammable liquid and vapour
H317: May cause an allergic skin reaction
H319: Causes serious eye irritation
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness
H350: May cause cancer
H360: May damage fertility or the unborn child
H362: May cause harm to breast-fed children
H371: May cause damage to organs
H372: Causes damage to organs through prolonged or repeated exposure
H373: May cause damage to organs through prolonged or repeated exposure
H412: Harmful to aquatic life with long lasting effects

Precautionary Statements

[Prevention]

P201: Obtain special instructions before use.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P263: Avoid contact during pregnancy/while nursing.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

[Emergency response]

P308+P313: IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

The product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Product Name: GRACEMATE POPPY/GARDENIA

Information on ingredients:

Chemical name	CAS No.	EC No.	Index No.	REACH Registrat ion No.*	Concentrat ion (wt %)	Classification**	Specific Concentration limits
Benzyl acetate	140-11-4	205-399-7	-	-	1.5	Skin Irrit. 2: H315	-

						Eye Irrit. 2: H319 STOT SE 3: H336 STOT SE 1: H370 STOT RE 1: H372 STOT RE 2: H373 Aquatic Chronic 3: H412	
Ethyl acetate	141-78-6	205-500-4	607-022-00-5	-	0.1 – 0.5	Flam. Liq. 2: H225 Eye Irrit. 2: H319 Acute Tox. 4: H332 STOT SE 3: H335 STOT SE 3: H336	-
Pentyl acetate	628-63-7	211-047-3	607-130-00-2	-	0.1 – 0.5	Flam. Liq. 3: H226 Skin Irrit. 2: H315 Eye Irrit. 2: H319 STOT SE 3: H335 STOT SE 3: H336 STOT RE 1: H372	-
Geraniol	106-24-1	203-377-1	-	-	0.1 – 1	Skin Irrit. 2: H315 Skin Sens. 1: H317 STOT SE 3: H336	-
1-Hexanol	111-27-3	203-852-3	603-059-00-6	-	0.1 – 0.5	Flam. Liq. 3: H226 Acute Tox. 4: H302 Skin Irrit. 2: H315 Eye Irrit. 2: H319 Aquatic Chronic 3: H412	-
d-Limonene	5989-27-5	227-813-5	601-029-00-7	-	0.1 – 0.5	Flam. Liq. 3: H226 Skin Irrit. 2: H315 Skin Sens. 1: H317	-

						Aquatic Acute 1: H400 Aquatic Chronic 1: H410	
Ethanol	64-17-5	200-578-6	603-002-00-5	-	44	Flam. Liq. 2: H225 Eye Irrit. 2: H319 STOT SE 3: H335 STOT SE 3: H336 Carc. 1: H350 Repr. 1: H360 STOT RE 1: H372 STOT RE 2: H373	-
Castor oil, hydrogenated, ethoxylated propoxylated	72245-04-6	-	-	-	5	-	-
Docusate sodium	577-11-7	209-406-4	-	-	0.73 – 0.75	Skin Irrit. 2: H315 Eye Irrit. 2: H319 Repr. 2: H361 Lact. : H362 Aquatic Chronic 3: H412	-
Water	7732-18-5	231-791-2	-	-	40.2	-	-

* Registration numbers of ingredients which shall be in compliance with Regulation (EC) No 1907/2006 will be filled in later.

** Full texts of relevant hazard statements and risk phrases can be seen in SECTION 16 of this SDS.

SECTION 4: First aid measures

4.1. Description of first aid measures

IF INHALED	If you feel unwell, get medical advice/ attention immediately and at rest. If symptoms continue, call a doctor/physician.
IF ON SKIN	Rinse with plenty of water and soap. If symptoms continue, call a doctor/physician.
IF IN EYES	Immediately rinse cautiously with water for 15 - 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms continue, call a doctor/physician.
IF SWALLOWED	Rinse mouth. Immediately get medical advice/attention.

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

- May cause an allergic skin reaction
- Causes serious eye irritation
- May cause respiratory irritation
- May cause drowsiness or dizziness
- May cause cancer
- May damage fertility or the unborn child
- May cause harm to breast-fed children
- May cause damage to organs
- Causes damage to organs through prolonged or repeated exposure
- May cause damage to organs through prolonged or repeated exposure

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

No information

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Use water mist, dry chemical powder, alcohol resistance foam or carbon dioxide.

Unsuitable extinguishing media

Applying direct water may be dangerous because fire may expand to surroundings.

5.2. Special hazards arising from the substance or mixture

In case of fire, toxic decomposition products may be generated.

5.3. Advice for firefighters

Cut off any ignition sources and extinguish with an appropriate agent.

Cool the surrounding tank and the buildings with direct water jet to avoid risk of fire spreading.

Take action from windward.

Keep out except responsible personnel.

Move container to a safe area if it can be done without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Wear suitable protective equipment (see SECTION 8) e.g., safety gloves, protective mask and/or protective glasses to prevent exposure.

For emergency responders:

Keep out except responsible personnel.

Wear suitable protective equipment described in “SECTION 8: Exposure controls/ personal protection”

6.2. Environmental precautions

Avoid release into the environment because product may cause local effects.

6.3. Methods and material for containment and cleaning up

Stop leak if you can do it without risk.

In case of small amounts, wipe off spilled material with waste or wiping cloth and collect it in an adequate waste container.

If case of large amounts, prevent leakage and enclose by embankment.

Do not eat or drink near handling and storage locations.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Prevent to flowing into drains, sewers, basements or closed areas.

6.4. Reference to other sections

Refer to “SECTION 8: Exposure controls/personal protection” and “SECTION 13: Disposal considerations” as appropriate.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures:

Install appropriate equipment and wear suitable protective apparatus described in “SECTION 8: Exposure controls/ personal protection”.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not eat, drink or smoke when using this product.
Wash contaminated clothing before reuse.

Advice on general occupational hygiene:

Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures:

Install appropriate equipment and wear suitable protective apparatus described in “SECTION 8: Exposure controls/ personal protection”.

Incompatible materials:

Oxidizing agents

Conditions for safe storage:

Avoid sunlight. Store in a cool place.
Avoid high-temperature materials.

Packing material:

Use a sealed container without damage or leakage.

7.3. Specific end use(s)

Air freshener

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acceptable concentration (exposure limit, biological exposure index)

EU IOELV-8hr (2000)	50 ppm (Pentylacetate)
EU IOELV-Short term (2000)	100 ppm (Pentylacetate)
UK HSE WELs-8hr TWA (2011)	200 ppm (Ethyl acetate) 1,000 ppm (Ethanol)
UK HSE WELs-Short term (2011)	400 ppm (Ethyl acetate)
ACGIH TLV-TWA (2016)	10 ppm (Benzyl acetate) 400 ppm (Ethyl acetate) 50 ppm (1-Pentyl acetate)
ACGIH TLV-STEL (2016)	100 ppm (1-Pentyl acetate) 1,000 ppm (Ethanol)

8.2. Exposure controls

Appropriate engineering controls:

Shower and eye washer should be available in the work area.
Under high temperature or in case of mist generation, use ventilation.

Personal protective equipment:

Respiratory protection	Wear appropriate protective mask or air aspirator as required.
Hand protection	If hand contact is possible, wear protective gloves.
Eye protection	Wear safety glasses or goggles if in eyes.
Skin and body protection	Wear protective clothing and apron if necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance (physical state, form and colour)	Liquid
Odour	Gardenia odour
Odour threshold	No information
pH	No information
Melting point/freezing point	No information
Initial boiling point and boiling range	No information
Flash point	22°C
Evaporation rate	No information
Flammability (solid, gas)	No information
Upper/lower flammability or explosive limits	No information
Vapour pressure	No information
Vapour density	No information
Relative density	No information
Solubility (ies)	No information
Partition coefficient: <i>n</i> -octanol/water	No information
Auto-ignition temperature	No information
Decomposition temperature	No information
Viscosity	No information
Explosive properties	No information
Oxidising properties	No information

9.2. Other information

No information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal handling condition.

10.2. Chemical stability

Stable under normal handling condition.

10.3. Possibility of hazardous reactions

No hazardous reaction expected under normal handling.

10.4. Conditions to avoid

Avoid sunlight. Store in a cool place.

10.5. Incompatible materials

Oxidizing agents

10.6. Hazardous decomposition products

In case of fire, toxic decomposition products may be generated.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on product:

No information

Information on ingredients:

Benzyl acetate

Acute toxicity (oral):

Rat LD₅₀ = 2,490 mg/kg

Acute toxicity (dermal):

Rabbit LD₅₀ > 5,000 mg/kg

Skin corrosion/irritation:

It was reported that this material caused irritation of skin, eyes and throat.

Serious eye damage/irritation:

This material caused eyes irritation of human and rabbit.

STOT-single exposure:

There is the statement that respiratory irritation and anesthetic actions in humans, and pulmonary congestion, and pulmonary edemas in mouse by steam exposure, and inhibition of central nerve.

STOT-repeated exposure:

There is the statement that this material causes disorders in the kidney of the humans by continuous inhalation exposure. In addition, there is the statement that atrophy and degeneration of nasal mucosas, hyperplasia of nasal submucosal, and the pigmentation of the nasal-mucosa epithelium were observed in feed administration to mice.

Ethyl acetate

Acute toxicity (oral):

Rat LD₅₀ = 4,940 mg/kg

Acute toxicity (dermal):

Rabbit LD₅₀ > 18,000 mg/kg

Acute toxicity (inhalation: vapour):

Rat LC₅₀ = 3,658ppmV

Serious eye damage/irritation:

There is a report of a Draize test using 4 rabbits where corneal opacity (4/4) was resolved within 2 days, iritis (1/4) was resolved within 2 days, conjunctivae redness, chemosis and discharge (4/4) disappeared by 7 days after application of 0.1 mL to the eyes, and the MMAS (Modified Maximum Average Score) at 24, 48 and 72-hour after application was calculated to be 15.0. As relevant information, the substance is classified as Xi; R36 in EU classification.

STOT-single exposure:

It was reported that exposure of volunteers for 4-hour to 400 ppm of the substance led to slight irritation of the eyes, nose and throat. There is a report that the inhalation exposure to cats and mice and the oral exposure to rabbits caused narcotic effects at dose levels of equal to or less than the LD₅₀ value. The effects are transient.

Pentyl acetate

Acute toxicity (oral):	Rat LD ₅₀ = 6,500 mg/kg
Acute toxicity (dermal):	Rabbit LD ₅₀ = 8,359 mg/kg
Skin corrosion/irritation:	In two rabbit skin irritation tests (the isomer mixture used as the test substance): "slight stimulativeness" and "moderate erythema, slight dropsy, and slight scaling seven days after application". In addition, there is a report that "disappearance by volatilization of the remarkable rate of a study substance could be considered at the time of application" for the examination where repetitive application of the isomer mixture on human skin. And 197 subjects did not observe irritation at all.
Serious eye damage/irritation:	There are corneal injury in eye of rabbit, but it was mild and reversible, and the result of having applied the isomer mixture to the eye of the rabbit were also mild (2nd of ten steps of stimulative scales). Although effect on the eye of isomer mixture postexposure is also reported in humans, it is adapted by long run challenge.
STOT-single exposure:	In the inhalation exposure examination in humans, condition such as "nasal irritation" and "throat irritation" is seen immediately after, and the consciousness may fall by high concentrations. Moreover, the anesthetic actions is observed in inhalation exposure of the rat.
STOT-repeated exposure:	There is a statement that visual field constriction is reported by part of humans who received occupation exposure of the isomer mixtures and also neurotoxicity is occurred. Moreover, the histologically degeneration of the optic nerve is acknowledged in repeated exposure to the rabbit.

Geraniol

Acute toxicity (oral):	Rat LD ₅₀ = 3,600 mg/kg
Acute toxicity (dermal):	Rabbit LD ₅₀ > 5,000 mg/kg
Skin corrosion/irritation:	In rabbit irritation test which expose three or four rabbits to 0.5 mL of this substance for four hours, these symptoms were observed: slight to moderate red spots and slight to moderate edema. These index of primary dermal irritation were 3.67, 3.33, and 2.92. In addition, in a human patch test, severe irritation was observed at 32% concentration.
Skin sensitization:	In Contact Dermatitis, this material is classified as contact allergen.
STOT-single exposure:	In a rat acute toxicity test, these symptoms were observed: suppression and coma.

1-Hexanol

Acute toxicity (oral):	Rat LD ₅₀ = 4,000 mg/kg This material is classified as "Acute Tox. 4: H302" in EU CLP.
Acute toxicity (dermal):	Rabbit LD ₅₀ = 2,538 mg/kg
Acute toxicity (inhalation: dust/mist):	Rat LD ₅₀ > 10.5 mg/L/4h
Skin corrosion/irritation:	In a human patch test, the substance was applied to the skin for up to four hours. The irritation response was significantly lower than that of the positive control. In a rabbit test compliant with OECD TG 404, the substance was indicated to be "moderately irritating". With unknown doses and administration periods, the substance caused "moderate irritation" and "erythema and swelling like a first degree burn".
Serious eye damage/irritation:	In a rabbit test, the averaged score values 72 hours after application were 2 for corneal clouding, 1.25 for iritis, 2.5 for conjunctival redness, and 2.5 for chemosis, but these signs completely subsided within 21 days after application, the substance was considered to be moderately irritating, and in another rabbit test, a 5% solution caused severe eye erosion while a 1% solution still caused severe irritation.

D-Limonene

Acute toxicity (oral):	Rat LD ₅₀ = 4,400 mg/kg
Acute toxicity (dermal):	Rabbit LD ₅₀ > 5,000 mg/kg
Skin corrosion/irritation:	In humans who received patch tests, irritation lasted for 72 hours, and a 2-hour dermal exposure caused a burning, itching, aching, and purpuric rash. In addition, rabbit tests (OECD TG 404) indicated that the substance was ranked 3.5 out of 8 based on the Primary Dermal Irritation Index.
Skin sensitization:	Humans applied with patch tests showed signs of sensitization 10 to 15 minutes after the application. Signs of sensitization were also observed in maximization tests using guinea pigs.

Ethanol

Acute toxicity (oral):	Rat LD ₅₀ = 6,200 mg/kg
Acute toxicity (dermal):	Rabbit LDL ₀ = 20,000 mg/kg
Acute toxicity (inhalation: vapour):	Rat LC ₅₀ = 66,280 ppmV (124.7 mg/L)
Serious eye damage/irritation:	Moderately irritating to rabbit eyes.
Carcinogenicity:	IARC classified as Group 1. (ethanol in alcoholic beverage)
Reproductive toxicity:	There are numerous reports that fetal alcohol syndrome which is characterized by growth deficiency, microcephaly, characteristic facial characteristics and mental retardation, was observed in the children of alcoholic women.
STOT-single exposure:	By inhalation exposure to humans, the respiratory and eye irritant effects are reported. Severe intoxication is characterized by marked muscular incoordination, blurred or double vision, stupor, hypothermia, vomiting and nausea, and convulsions.
STOT-repeated exposure:	Long-term consumption of large doses of alcohol causes toxic effects in almost all organ systems. The most affected target organ is the liver; beginning with fatty degeneration, damage can progress via necrosis and fibrotic stages to liver cirrhosis.

Docosate sodium

Acute toxicity (oral):	Rat LD ₅₀ = approx. 2,000 mg/kg
Acute toxicity (dermal):	Rabbit LD ₅₀ > 10 g/kg
Skin corrosion/irritation:	In rabbit irritation tests that exposure 0.5 mL of this substance, the score at 24 hours later were 1.66 (red spots) and 2.5 (edema), and at 72 hours later were 1.66 (red spots) and 1.6 (edema). In this tests, necrosis and irreversible change were not observed.
Serious eye damage/irritation:	In rabbit irritation test that exposure 100 mg of this substance, necrosis and irreversible change were not observed. This substance was irritating. In a rabbit test that expose 250µg, mild irritation was reported.
Reproductive toxicity:	In pregnant rat test, increase of resorption and malformation of infant were reported. In three generation rats test mixed in feed (0, 0.5 or 1.0% mixed), the breast milk caused control of weight gain and reduction of survival rate.

SECTION 12: Ecological information

12.1. Toxicity:

Information on product: No information

Information on ingredients:

Benzyl acetate

Aquatic acute toxicity: Fish (*Oryzias latipes*) 96h LC₅₀ = 4 mg/L
Aquatic chronic toxicity: Fish (*Oryzias latipes*) 28d NOEC = 0.92 mg/L

Ethyl acetate

Aquatic acute toxicity: Fish (Fathead minnow) 96h LC₅₀ = 230 mg/L
Crustacea (*Daphnia magna*) 24h LC₅₀ = 2,500 mg/L
Aquatic chronic toxicity: No information

Pentyl acetate

Aquatic acute toxicity: Crustacea (Brine shrimp) 24h LC₅₀ = 53000microg/L
Aquatic chronic toxicity: No information

Geraniol

Aquatic acute toxicity: Fish (Brown trout) 96h LC₅₀ = 2.6 mg/L
Aquatic chronic toxicity: No information

1-Hexanol

Aquatic acute toxicity: Fish (Fathead minnow) 96h LC₅₀ = 97.7 mg/L
Aquatic chronic toxicity: No information

D-Limonene

Aquatic acute toxicity: Crustacea (*Daphnia magna*) 48h EC₅₀ = 0.421 mg/L
Aquatic chronic toxicity: No information

Ethanol

Aquatic acute toxicity: Algae (*Chlorella*) 96h EC₅₀ = 1,000 mg/L
Crustacea (*Daphnia magna*) 48h EC₅₀ = 5,463 mg/L
Fish (Rainbow trout) 96h LC₅₀ = 11,200ppm
Aquatic chronic toxicity: Crustacea (*Ceriodaphnia dubia*) 10d NOEC = 9.6 mg/L

Docusate sodium

Aquatic acute toxicity: Crustacea (*Daphnia magna*) 48h EC₅₀ = 19.0 mg/L
Fish (*Oryzias latipes*) 96h LC₅₀ = 68.2 mg/L
Aquatic chronic toxicity: Crustacea (*Daphnia magna*) 21d NOEC = 7.03 mg/L

12.2. Persistence and degradability:

Information on product: No information

Information on ingredients:

Benzyl acetate
BOD: 95% (28days)

Ethanol
BOD: 89%

Docusate sodium

BOD: 0%

12.3. Bioaccumulative potential:

Information on product: No information

Information on ingredients:

Pentyl acetate

log Kow=2.3

Geraniol

log Kow= 3.47

12.4. Mobility in soil:

Information on product: No information

Information on ingredients: No information

12.5. Results of PBT and vPvB assessment:

The product does not meet the PBT and vPvB criteria.

12.6. Other adverse effects:

No information

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste in accordance with applicable local, regional and international regulations and standards.

When disposing, consult to a certificated waste trader or local offices if they deal with the waste.

Used container should be recycled after cleaning or dispose of in compliance with related laws and local regulations.

Contents should be removed completely when dispose of empty containers.

SECTION 14: Transport information

- | | |
|----------------------------------|--------------------------|
| 14.1. UN number | 1993 |
| 14.2. UN proper shipping name | FLAMMABLE LIQUID, n.o.s. |
| 14.3. Transport hazard class(es) | 3 |
| 14.4. Packing group | II |
| 14.5. Environmental hazards | Not applicable |

14.6. Special precautions for user

When transporting, avoid direct sunlight. Confirm no leakage to containers. When loading, prevent containers from falling, dropping off or damaging. Take preventive measures of collapse.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code

Not applicable

SECTION 15: Regulatory information

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

The product and its ingredients are not regulated by specific provisions related to protection of human health or the environment at EU level, e.g. not considered as SVHCs or POPs.

15.2. Chemical safety assessment

Not conducted

SECTION 16: Other information

Update history:

Date of issue: 12th May, 2017

References:

Information of DIA CHEMICAL CO., LTD.
NITE GHS classification results (2017)
ACGIH, American Conference of Governmental Industrial Hygienists (2016) TLVs and BEIs.

Relevant risk phrases of which do not appear elsewhere in this SDS

H226: Flammable liquid and vapour
H302: Harmful if swallowed
H315: Causes skin irritation
H332: Harmful if inhaled
H361: Suspected of damaging fertility or the unborn child
H370: Causes damage to organs
H400: Very toxic to aquatic life
H410: Very toxic to aquatic life with long lasting effects

Abbreviations

PBT: Persistent, Bioaccumulative and Toxic substance
POPs: Persistent Organic Pollutants
STOT: Specific Target Organ Toxicity
SVHC: Substances of Very High Concern
vPvB: Very Persistent and Very Bioaccumulative

[Disclaimer]

This SDS has been prepared based on the best available information however, it may not be sufficient in some cases. It is user's responsibility to modify or update any contents in this SDS regarding information on hazardous properties and/or instruction for safe handling of the product when they become available. Precautionary measures in this SDS are only applicable for normal handling conditions and it is necessary to take appropriate additional measures to ensure safe handling which depend on your specific use conditions or situations.