Date of issue: 12th May, 2017

SAFETY DATA SHEET

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

1.1. Product identifier

Product name: GRACEMATE POPPY/CATTLEYA

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 Eye Irrit. 2: H319 STOT SE 3: H335 STOT SE 3: H336 Carc. 1: H350 Repr. 1: H360 Lact. : H362 STOT RE 1: H372 STOT RE 2: H373

2.2. Label elements

In accordance with EC No 1272/2008:

Pictogram







Page2 of 13 Date of issue: 12th May, 2017

Signal word Danger

Hazard Statements H225: Highly flammable liquid and vapour

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

H372: Causes damage to organs through prolonged or

repeated exposure

H373: May cause damage to organs through prolonged or

repeated exposure

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/CATTLEYA

Information on ingredients:

Chemical	CAS No.	EC No.	Index	REACH	Concentrat	Classification**	Specific Concentration limits
name			No.	Registrat ion No.*	ion (wt %)		Concentration minus
Pentyl	628-63-7	211-047-	607-130-	-	0.1 - 0.5	Flam. Liq. 3:	-
acetate		3	00-2			H226	
						Skin Irrit. 2:	
						H315	
						Eye Irrit. 2:	
						H319	
						STOT SE 3:	
						H335	
						STOT SE 3:	
						Н336	

DIA CHEMICAL CO., LTD.
Page3 of 13
Date of issue: 12th May, 2017

						OTTOT DE 1	
						STOT RE 1:	
						H372	
Benzyl	140-11-4	205-399-	-	-	0.4	Skin Irrit. 2:	-
acetate		7				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	141-78-6	205-500-	607-022-	-	0.01 - 0.1	Flam. Liq. 2:	-
acetate		4	00-5			H225	
						Eye Irrit. 2:	
						H319	
						Acute Tox. 4:	
						Н332	
						STOT SE 3:	
						H335	
						STOT SE 3:	
						H336	
Dangral	100.51.6	202.050	(02.057		0.01 0.1		
Benzyl alcohol	100-51-6	202-859-	603-057-	-	0.01 - 0.1	Acute Tox. 4:	-
alcolloi		9	00-5			H302	
						Acute Tox. 4:	
						H312	
						Eye Irrit. 2:	
						H319	
						Acute Tox. 3:	
						H331	
Galaxolid	1222-05-	214-946-	603-212-	-	0.01 - 0.1	Repr. 2: H361	-
e	5	9	00-7			Aquatic Acute	
						1: H400	
						Aquatic Chronic	
						1: H410	
Benzyl	120-51-4	204-402-	607-085-	_	0.01 - 0.1	Acute Tox. 4:	-
benzoate	120-31-4	9	007-083-	_	0.01 – 0.1	H302	
		7	00-9			Aquatic Chronic	
T/th 1	(4.17.5	200.550	(02.002		4.4	2: H411	
Ethanol	64-17-5	200-578-	603-002-	-	44	Flam. Liq. 2:	-
		6	00-5			H225	
						Eye Irrit. 2:	
						H319	
						STOT SE 3:	
						H335	
						STOT SE 3:	
						Н336	
						Carc. 1: H350	
						Repr. 1: H360	
						STOT RE 1:	
						H372	
						STOT RE 2:	

Page4 of 13 Date of issue: 12th May, 2017

						H373	
Castor oil, hydrogen ated, ethoxylat ed propoxyla ted	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-	-	-	40.2	-	-

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

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

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

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

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

Page5 of 13 Date of issue: 12th May, 2017

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.

Page 6 of 13 Date of issue: 12th May, 2017

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)	50 ppm (1-Pentyl acetate) 10 ppm (Benzyl acetate)
ACGIH TLV-STEL (2016)	400 ppm (Ethyl acetate) 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

Page7 of 13

Date of issue: 12th May, 2017

Appearance	Liquid
ADDEALANCE	

(physical state, form and colour)

Odour Cattleya odour
Odour threshold No information
PH No information
Melting point/freezing point No information
Initial boiling point and boiling range
Flash point Cattleya odour
No information
No information
22°C

Evaporation rate No information Flammability (solid, gas) No information Upper/lower flammability or No information

explosive limits

No information Vapour pressure Vapour density No information Relative density No information Solubility (ies) No information Partition coefficient: *n*-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

Page 8 of 13 Date of issue: 12th May, 2017

Information on ingredients:

Pentyl acetate

Acute toxicity (oral):
Acute toxicity (dermal):

Skin corrosion/irritation:

Serious eye damage/irritation:

STOT-single exposure:

STOT-repeated exposure:

Benzyl acetate

Acute toxicity (oral): Acute toxicity (dermal):

Skin corrosion/irritation:

Serious eye damage/irritation:

STOT-single exposure:

STOT-repeated exposure:

Ethyl acetate

Rat $LD_{50} = 6,500 \text{ mg/kg}$

Rabbit $LD_{50} = 8,359 \text{ mg/kg}$

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.

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.

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.

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.

Rat $LD_{50} = 2,490 \text{ mg/kg}$

Rabbit $LD_{50} > 5,000 \text{ mg/kg}$

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

and throat.

This material caused eyes irritation of human and rabbit.

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

central nerve.

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.

Page 9 of 13

Date of issue: 12th May, 2017

Acute toxicity (oral): Rat $LD_{50} = 4,940 \text{ mg/kg}$

Acute toxicity (dermal): Rabbit $LD_{50} > 18,000 \text{ mg/kg}$ Acute toxicity (inhalation: vapour): Rat $LC_{50} = 3,658 \text{ppmV}$

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.

Benzyl alcohol

Acute toxicity (oral): Rat $LD_{50} = 1,230 \text{ mg/kg}$ Acute toxicity (dermal): Rabbit $LD_{50} = 2,000 \text{ mg/kg}$ Acute toxicity (inhalation: vapour): Rat $LC_{50} = 12.5 \text{ mg/L/4h}$

Serious eye damage/irritation:

The results of eye irritation tests using rabbits (OECD TG

405) showed that the substance was moderately irritating.

Galaxolide

Acute toxicity (oral): Rat $LD_{50} > 3,000 \text{ mg/kg}$ Acute toxicity (dermal): Rat $LD_{50} > 6,500 \text{ mg/kg}$

Rabbit $LD_{50} > 3,250 \text{ mg/kg}$

Reproductive toxicity:

There no data about the reproductive effect of human.

However, there were reports that this substance was detected

in breast feed.

Benzyl benzoate

Acute toxicity (oral): Rat $LD_{50} = 1,880 \text{ mg/kg}$ Acute toxicity (dermal): Rat $LD_{50} = 4.46 \text{ g/kg}$ Rabbit $LD_{50} = 4 \text{ g/kg}$

Ethanol

Page 10 of 13

Date of issue: 12th May, 2017

Acute toxicity (oral): Rat $LD_{50} = 6,200 \text{ mg/kg}$ Acute toxicity (dermal): Rabbit $LDL_0 = 20,000 \text{ mg/kg}$

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.

Docusate sodium

Acute toxicity (oral): Rat $LD_{50} = approx. 2,000 \text{ mg/kg}$

Acute toxicity (dermal): Rabbit $LD_{50} > 10 \text{ g/kg}$

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:

Pentyl acetate

Aquatic acute toxicity: Crustacea (Brine shrimp) $24h LC_{50} = 53000microg/L$

Aquatic chronic toxicity: No information

Benzyl acetate

Aquatic acute toxicity: Fish (*Oryzias latipes*) 96h $LC_{50} = 4 \text{ mg/L}$ Aquatic chronic toxicity: Fish (*Oryzias latipes*) 28d NOEC = 0.92 mg/L

Page11 of 13

Date of issue: 12th May, 2017

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

Benzyl alcohol

Aquatic acute toxicity: Fish (Fathead minnow) 96h LC₅₀ = 460 mg/L

Crustacea (*Daphnia magna*) 48h EC₅₀ = 230mg/L

Algae 72h $EC_{50} = 770 \text{ mg/L}$

Aquatic chronic toxicity: No information

Galaxolide

Aquatic acute toxicity: Crustacean (Acartia tonsa) 48h LC₅₀ = 0.47 mg/L Aquatic chronic toxicity: Crustacean (Acartia tonsa) 6d NOEC = 0.038 mg/L

Benzyl benzoate

Aquatic acute toxicity: Crustacea (a species of Grammaridea) 96h $LC_{50} = 4.8 \text{ mg/L}$

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 $LC_{50} = 11,200$ ppm

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 $LC_{50} = 68.2 \text{ mg/L}$

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)

Benzyl benzoate

BOD: 90%

Ethanol

BOD: 89%

Docusate sodium

BOD: 0%

12.3. Bioaccumulative potential:

Information on product:

No information

Information on ingredients:

Page 12 of 13 Date of issue: 12th May, 2017

Pentyl acetate

log Kow=2.3

Benzyl benzoate

log Pow = 3.97

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
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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:

Page 13 of 13

Date of issue: 12th May, 2017

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

H312: Harmful in contact with skin

H315: Causes skin irritation

H331: Toxic if inhaled

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

H411: Toxic to aquatic life with long lasting effects

H412: Harmful 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.