SAFETY DATA SHEET

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

1.1. Product identifier

Product name: GRACEMATE POPPY/CHERRY

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
STOT RE 1: H372
STOT RE 2: H373

2.2. Label elements

In accordance with EC No 1272/2008:

Pictogram

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 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. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/protective clothing/eye protection/face protection.
[Emergency response]	P308+P313: IF exposed or concerned: Get medical advice/attention.
[Storage]	P405: Store locked up.

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/CHERRY

Information on ingredients:

Chemical name	CAS No.	EC No.	Index No.	REACH Registration No.*	Concentration (wt %)	Classification**	Specific Concentration limits
Benzaldehyde	100-52-7	202-860-4	605-012-00-5	-	2.63	Acute Tox. 4: H302 Eye Irrit. 2: H319 STOT SE 3: H335 STOT SE 3: H336 STOT SE 2: H371 STOT RE 2: H373	-

						Aquatic Chronic 3: H412	
2-Methylbutyl acetate	624-41-9	210-843-8	607-130-00-2	-	0.5 – 1	Flam. Liq. 3: H226 Skin Irrit. 2: H315 Eye Irrit. 2: H319 STOT RE 1: H372	-
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	-
Benzyl alcohol	100-51-6	202-859-9	603-057-00-5	-	1.05	Acute Tox. 4: H302 Acute Tox. 4: H312 Eye Irrit. 2: H319 Acute Tox. 3: H331	-
Ethanol	64-17-5	200-578-6	603-002-00-5	-	58	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	-
Sorbitan monooleate, ethoxylated	9005-65-6	500-019-9	-	-	5	-	-
Water	7732-18-5	231-791-2	-	-	27	-	-

* 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

Causes serious eye irritation
May cause respiratory irritation
May cause drowsiness or dizziness
May cause cancer
May damage fertility or the unborn child
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	Not applicable
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 (2-Methylbutyl acetate) 400 ppm (Ethyl acetate)
ACGIH TLV-STEL (2016)	100 ppm (2-Methylbutyl 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	Cherry 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: *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

Information on ingredients:

Benzaldehyde

Acute toxicity (oral):	Rat LD_{50} = 1,292 mg/kg
Serious eye damage/irritation:	In rabbit eye irritation test, moderate irritation was reported. In addition, eye irritation, eyelid twitching, lacrimation and conjunctival injection were observed. In rabbit eye irritation test, slight irritation was observed.
STOT-single exposure:	This substance causes respiratory tract irritation of human. These symptoms were reported; pharyngalgia, anesthetic action. In rat oral test, these symptoms were observed at 1,000 – 2,850 mg/kg; anesthetic action, lethargic sleep, calm, thrill, spasmodic gait.
STOT-repeated exposure:	In rat inhalation test for 14 days, these symptoms were observed at 1,000 ppm (0.68 mg/L); abnormal gait, spasm, straub tail, decrease of red cell, haemoglobin and haematocrit, weight increase of liver, increase of AST concentration in blood.

2-Methylbutyl acetate

Acute toxicity (oral):	Rat LD_{50} = 12,306 mg/kg (35% 2-methylbutyl acetate mixture)
Acute toxicity (dermal):	Rabbit LD_{50} = 8,359 mg/kg (35% 2-methylbutyl acetate mixture)
Skin corrosion/irritation:	There is a report that all amyl acetate compounds including this substance cause irritation to the skin.
Serious eye damage/irritation:	There is a report that all amyl acetate compounds including this substance cause irritation to the eyes.
STOT-repeated exposure:	There were reports about exposure test of isomers mixture including this substance. In human test, the workers exposed for a month to 30 years, emerged eye irritation and photophobia. Furthermore, in case of 30 persons exposed 3,700 – 14,800 ppm (20 – 80 mg/L) of isomers mixture, they emerged photophobia, conjunctiva irritation, lacrimation, narrowing of visual field and atrophic change of the optic nerve. In rabbit test that exposed 7,500ppm of isomers mixture for 60 days, degeneration of optic nerve was observed.

Ethyl acetate

Acute toxicity (oral):	Rat LD_{50} = 4,940 mg/kg
Acute toxicity (dermal):	Rabbit LD_{50} > 18,000 mg/kg
Acute toxicity (inhalation: vapour):	Rat LC_{50} = 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 LD_{50} value. The effects are transient.

Benzyl alcohol

Acute toxicity (oral):	Rat LD_{50} = 1,230 mg/kg
Acute toxicity (dermal):	Rabbit LD_{50} = 2,000 mg/kg
Acute toxicity (inhalation: vapour):	Rat LC_{50} = 12.5 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.

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} = 66,280ppmV (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.

SECTION 12: Ecological information

12.1. Toxicity:

Information on product: No information

Information on ingredients:

Benzaldehyde

Aquatic acute toxicity:	Fish (Bluegill) 96h LC_{50} = 1.07 mg/L Crustacea (*Daphnia magna*) 48h EC_{50} = 50 mg/L
Aquatic chronic toxicity:	Fish (Fathead minnow) 7d NOEC = 0.22 mg/L

Ethyl acetate

Aquatic acute toxicity:	Fish (Fathead minnow) 96h LC_{50} = 230 mg/L Crustacea (*Daphnia magna*) 24h LC_{50} = 2,500 mg/L
Aquatic chronic toxicity:	No information

Benzyl alcohol

Aquatic acute toxicity:	Fish (Fathead minnow) 96h LC_{50} = 460 mg/L Crustacea (*Daphnia magna*) 48h EC_{50} = 230mg/L Algae 72h EC_{50} = 770 mg/L
Aquatic chronic toxicity:	No information

Ethanol

Aquatic acute toxicity:	Algae (*Chlorella*) 96h EC_{50} = 1,000 mg/L Crustacea (*Daphnia magna*) 48h EC_{50} = 5,463 mg/L Fish (Rainbow trout) 96h LC_{50} = 11,200ppm
Aquatic chronic toxicity:	Crustacea (*Ceriodaphnia dubia*) 10d NOEC = 9.6 mg/L

12.2. Persistence and degradability:

Information on product: No information

Information on ingredients:

Benzaldehyde

BOD = 66%, TOC = 98%, HPLC = 100%

Ethanol

BOD: 89%

12.3. Bioaccumulative potential:

Information on product: No information

Information on ingredients:

Benzaldehyde

log Kow= 1.48

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
H312: Harmful in contact with skin
H315: Causes skin irritation
H331: Toxic if inhaled
H332: Harmful if inhaled
H371: May cause damage to organs
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.