Safety Data Sheet dated 12/6/2018, version 3

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

1.1. Product identifier

Mixture identification:

Trade name: CARBOMOVE

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

Recommended use:

Technical product

Uses advised against:

do not use on humans and animals

1.3. Details of the supplier of the safety data sheet

Company:

STAC PLASTIC SPRAY S.R.L. Via E. De Nicola 9/11 10036 Settimo Torinese (To) Italia.

STAC PLASTIC SPRAY S.R.L. Tel. n.. +39 011 8977566 Fax n. +39 011 8977491

Competent person responsible for the safety data sheet:

Montini Vittorino stacplas@stacplastic.com

1.4. Emergency telephone number

STAC PLASTIC SPRAY S.R.L. Tel. n., +39 011 8977566 Fax n. +39 011 8977491

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.

- Warning, Skin Irrit. 2, Causes skin irritation.
- Warning, STOT SE 3, May cause drowsiness or dizziness.
- Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P391 Collect spillage.

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contains

hydrocarbons c7, n-alkanes, isoalkanes, cyclics

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

section 10.3

SECTION 3: Composition/information on ingredients

3.1. Substances

ΝΔ

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number		Classification
>= 30% - < 40%	GPL	CAS: EC: REACH No.:	68476-40-4 270-681-9 01- 2119486557- 22-XXXX	2.5/C Press. Gas (Comp.) H280 2.2/1 Flam. Gas 1 H220 DECLK (CLP)*
>= 30% - < 40%	hydrocarbons c7, n-alkanes, isoalkanes, cyclics	EC: REACH No.:	927-510-4 01- 2119666169- 27-0000	2.6/2 Flam. Liq. 2 H225 3.2/2 Skin Irrit. 2 H315 4.1/C2 Aquatic Chronic 2 H411 3.10/1 Asp. Tox. 1 H304 3.8/3 STOT SE 3 H336
>= 15% - < 20%	Hydrocarbons, C9-C11, n- alkanes, isoalkanes, cyclics, <2% aromatics	EC:	919-857-5	 2.6/3 Flam. Liq. 3 H226 3.8/3 STOT SE 3 H336 3.10/1 Asp. Tox. 1 H304
>= 0.1% - < 0.25%	diamine alkyl olelca dioleate	CAS: EC:	40027-38-1 254-754-2	3.1/4/Oral Acute Tox. 4 H302 3.2/1A Skin Corr. 1A H314 4.1/A1 Aquatic Acute 1 H400

^{*}DECLK (CLP): This substance is classified in accordance with Note K, Annex VI of EC Regulation CE 1272/2008. The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w 1,3-butadiene (EINECS No 203-450-8). If the

substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 (Table 3.1) or the S-phrases (2-)9-16 (Table 3.2) should apply. This note applies only to certain complex oil-derived substances in Part 3.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eves contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

For symptoms and effects due to the contained substances see chapter 11

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Follow the doctor's instructions.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

Water jets. Use them exclusively to cool containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

store in a cool, well ventilated place, away from heat, flames, sparks or other sources of ignition

keep only in the original container away from sunlight neighborhoods

avoid contact with skin and eyes, inhalation of vapours/mists/dusts.

do not use empty containers before they are cleaned.

contaminated clothing must be replaced before entering the dining areas.

at work do not eat or drink.

avoid the accumulation of electrostatic charges.

do not smoke

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

hydrocarbons c7, n-alkanes, isoalkanes, cyclics

TLV TWA - 400ppm-1639,26 mg/m3

TLV STEL - 500ppm-2049,08 mg/m3

VLE 8h - 2085 mg/m3-500ppm

DNEL Exposure Limit Values

hydrocarbons c7, n-alkanes, isoalkanes, cyclics

Worker Professional: 300 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 2085 mg/l - Exposure: Human Inhalation - Frequency: Long Term,

Consumer: 149 mg/kg/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Worker Professional: 208 mg/kg/d - Consumer: 125 mg/kg/d - Exposure: Human

Dermal - Frequency: Long Term (repeated)

Worker Professional: 871 mg/kg/d - Consumer: 185 mg/kg/d - Exposure: Human

Inhalation - Frequency: Long Term (repeated)

Consumer: 125 mg/kg/d - Exposure: Human Oral - Frequency: Long Term (repeated)

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

Do not expose to temperatures exceeding 50° c.

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	colourless liquid		
Odour:	characteristic		
Odour threshold:	Not Relevant		
pH:	Not Relevant		
Melting point / freezing point:	Not Relevant		
Initial boiling point and boiling range:	Not Relevant		
Flash point:	< 0 ° C		
Evaporation rate:	Not Relevant		
Solid/gas flammability:	Not Relevant		
Upper/lower flammability	Not Relevant		
or explosive limits:			
Vapour pressure:	4 bar +/- 1		
Vapour density:	> 2		
Relative density:	0.675 kg/l +/- 0.05		
Solubility in water:	undissolvable		
Solubility in oil:	complete		
Partition coefficient (n-	Not Relevant		
octanol/water):			
Auto-ignition temperature:	>200°C		
Decomposition	Not Relevant		

temperature:		
Viscosity:	Not Relevant	
Explosive properties:	sezione 10.3	
Oxidizing properties:	Not Relevant	

9.2. Other information

Properties	Value	Method:	Notes:
kinematic viscosity:	kv > 2,05 mm2/s (a 40°C)		
Miscibility:	Not Relevant		
Fat Solubility:	soluble in organic solvents		
Conductivity:	Not Relevant		
Substance Groups relevant properties	Not Relevant		

SECTION 10: Stability and reactivity

10.1. Reactivity

avoid contact with strong acids and bases and oxidizing agents.

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

avoid mixing the product with strong oxidizers and strong acids may form explosive vapor / air mixtures in places not well ventilated

10.4. Conditions to avoid

avoid exposing the product to high temperatures avoid the accumulation of electrostatic charges.

keep away from heat, sources of ignition

10.5. Incompatible materials

acids, alkalis and alkaline metals

oxidizing agents

10.6. Hazardous decomposition products

the product is flammable, following combustion can lead to the formation of dangerous decomposition products

by thermal decomposition can rid COx

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

Toxicological information of the main substances found in the product:

GPL - CAS: 68476-40-4

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 658 mg/l

hydrocarbons c7, n-alkanes, isoalkanes, cyclics

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 23300 mg/m3 - Duration: 4h

Test: LD50 - Route: Skin - Species: Rat > 2920 mg/kg Test: LD50 - Route: Oral - Species: Rat > 5840 mg/kg

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 4951 mg/m3

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Test: LD50 - Route: Oral - Species: Rat > 15000 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 3160 mg/kg
Test: NOAEL - Route: Oral - Species: Rat > 30000 Ppm
g) reproductive toxicity:
Test: NOAEL - Species: Rat > 5220 mg/m3
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If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity:
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- i) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

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Adopt good working practices, so that the product is not released into the environment.
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GPL - CAS: 68476-40-4 a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish Negative 19 mg/l - Duration h: 96

Endpoint: LC50 - Species: Daphnia Negative 14.2 mg/l - Duration h: 48

Endpoint: EL50 - Species: Algae Negative 7.7 mg/l - Duration h: 96

hydrocarbons c7, n-alkanes, isoalkanes, cyclics

a) Aquatic acute toxicity:

Endpoint: EL50 - Species: Fish = 1.5 mg/l - Duration h: 48

Endpoint: LC50 - Species: Daphnia = 4 mg/l - Duration h: 24

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 1000 mg/l - Duration h: 24 Endpoint: EL50 - Species: Daphnia > 1000 mg/l - Duration h: 24

Endpoint: EL50 - Species: Algae > 1000 mg/l - Duration h: 72

12.2. Persistence and degradability

None

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

contaminated packaging should be sent for recovery or disposal in compliance with national regulations on waste management

reuse if possible. Product residues are to be considered hazardous waste. disposal must be entrusted to authorised waste management, in compliance with national and, where appropriate, local.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: 1950 IATA-Un number: 1950 IMDG-Un number: 1950

14.2. UN proper shipping name 14.3. Transport hazard class(es)

ADR-Class: 2.5°F CAP. 2.2.2.1.6 UN1950

IATA-Class: 2.1

IMDG-Class: 2 Aerosols UN 1950

14.4. Packing group

14.5. Environmental hazards

Marine pollutant: Marine pollutant

14.6. Special precautions for user

IMDG-Page: 2102

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P3a, E2

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Text of phrases referred to under heading 3:

H280 Contains gas under pressure; may explode if heated.

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

Hazard class and hazard category	Code	Description
Flam. Gas 1	2.2/1	Flammable gas, Category 1
Aerosols 1	2.3/1	Aerosol, Category 1
Press. Gas (Comp.)	2.5/C	Gases under pressure (Compressed gas)
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure,
		Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Paragraphs modified from the previous revision:

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

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 4: First aid measures

SECTION 5: Firefighting measures

SECTION 6: Accidental release measures

SECTION 7: Handling and storage

SECTION 8: Exposure controls/personal protection

SECTION 9: Physical and chemical properties

SECTION 10: Stability and reactivity

SECTION 11: Toxicological information

SECTION 12: Ecological information

SECTION 13: Disposal considerations

SECTION 14: Transport information

SECTION 15: Regulatory information

SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aerosols 1, H222+H229	On basis of test data
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336	Calculation method

Aguatic Chronic 2, H411	Calculation method
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This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.