

D405 Anaerobic Activator

According to Regulation (EC) No 1907/2006, Annex II

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product name D405 Anaerobic Activator

Container size 200ml

REACH registration notes All chemicals used in this product have been registered under REACH where required.

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

Identified uses Activator for Anaerobic Adhesives

1.3. Details of the supplier of the safety data sheet

Supplier www.delta-adhesives.co.uk
Delta Adhesives Ltd
Units 39-41 Claycliffe Business Park
Cannon Way, Barugh Green
Barnsley, South Yorkshire
S75 1JU
Tel: 01226 381 571
Fax: 01226 381722

1.4. Emergency telephone number

Emergency telephone Delta Adhesives Ltd +44 (0) 1226 381 571 (Mon-Fri 09:00 - 17:00)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification (EC 1272/2008)**

Physical hazards Aerosol 1 - H222, H229

Health hazards Skin Irrit. 2 - H315 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements**Pictogram****Signal word**

Danger

Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised 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	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. P261 Avoid breathing spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501 Dispose of contents/ container in accordance with national regulations.
Contains	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
Supplementary precautionary statements	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER/ doctor if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/ attention. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

2.3. Other hazards

In use may form flammable/explosive vapour-air mixture. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane			30-60%
CAS number: —	EC number: 921-024-6	REACH registration number: 01-2119475514-35-XXXX	
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411			
PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS			30-60%
CAS number: 68476-85-7	EC number: 270-704-2		
Classification Flam. Gas 1 - H220 Press. Gas, Liquefied - H280			

COPPER NAPHTHENATE		<1%
CAS number: 1338-02-9	EC number: 215-657-0	
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments CAS 68476-85-7 Petroleum gases - as the substance contains less than 0.1%w/w 1,3-butadiene the full harmonised classification regarding Muta. 1B H340 and Carc. 1A H350 does not apply.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues. Remove contaminated clothing.
Eye contact	Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Remove any contact lenses and open eyelids wide apart. Get medical attention promptly if symptoms occur after washing.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. There may be a feeling of tightness in the chest with shortness of breath. Vapours may cause drowsiness and dizziness.
Ingestion	There may be soreness and redness of the mouth and throat. May cause discomfort if swallowed.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	There may be irritation and redness. Eyes may water profusely.

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

Notes for the doctor Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use alcohol-resistant foam, carbon dioxide or dry powder to extinguish.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up. May explode when heated or when exposed to flames or sparks.

Hazardous combustion products Oxides of carbon. Acrid smoke or fumes.

5.3. Advice for firefighters

Protective actions during firefighting Use water spray to reduce vapours. Containers can burst violently or explode when heated, due to excessive pressure build-up. Cool aerosol containers exposed to heat with water spray and remove container, if no risk is involved. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours. Avoid contact with eyes and prolonged skin contact.

For non-emergency personnel For the greatest protection, clothing should include anti-static overalls, boots and gloves.

For emergency responders For the greatest protection, clothing should include anti-static overalls, boots and gloves.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13. See Section 7 for information on safe handling.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Usage precautions Keep away from heat, sparks and open flame. Read and follow manufacturer's recommendations. Avoid inhalation of vapours and spray/mists. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited. Static electricity and formation of sparks must be prevented. Do not eat, drink or smoke when using this product.

Advice on general occupational hygiene

Remove contaminated clothing and protective equipment before entering eating areas. Wash at the end of each work shift and before eating, smoking and using the toilet. Clean equipment and the work area every day.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. Do not pierce or burn, even after use. Pressurised container: Must not be exposed to temperatures above 50°C.

Storage class

Extremely Flammable Aerosol

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Usage description

Solvent based aerosol.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

WEL = Workplace Exposure Limit

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

DNEL

Consumer - Oral; Long term systemic effects: 699 mg/kg/day
 Workers - Oral; Long term systemic effects: 2035 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 699 mg/kg/day
 Workers - Dermal; Long term systemic effects: 773 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 608 mg/m³

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Ensure that the direction of airflow is clearly away from the worker. Use approved respirator if air contamination is above an acceptable level. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof electrical, ventilating and lighting equipment. Ensure operatives are trained to minimise exposure. Refer to protective measures listed in sections 7 and 8.

Personal protection

Wear protective work clothing.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374. Laminate (PE/PA/PE), 2.5mil (0.06mm), >480 min. Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

Provide eyewash station. Avoid contact with eyes and skin.

Hygiene measures	Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. Use appropriate hand lotion to prevent defatting and cracking of skin. Wash at the end of each work shift and before eating, smoking and using the toilet.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. If ventilation is inadequate, suitable respiratory protection must be worn. For short term use an AX filter is recommended.
Thermal hazards	Extremely cold, can cause frost bite.
Environmental exposure controls	Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and Chemical Properties**9.1. Information on basic physical and chemical properties**

Appearance	Aerosol container containing a mixture of active ingredients, solvents and propellants
Colour	Green.
Odour	Acetone. Ketonic.
Odour threshold	Data lacking.
Melting point	Data lacking.
Flash point	Scientifically unjustified.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	No specific test data are available.
Other flammability	No specific test data are available.
Vapour density	Not available.
Relative density	<1 @ 20°C Liquid activator density.
Bulk density	Not applicable.
Partition coefficient	Not available.
Decomposition Temperature	Not available.
Explosive properties	In use may form flammable /explosive vapour-air mixture.
Explosive under the influence of a flame	Yes
Comments	A flash point method is not available but the major hazardous component, the Propellant has a flash point of <-60°C with flammability limits of 10.9% vol. upper and 1.4% vol. lower.

9.2. Other information

Other information	Not available.
Volatile organic compound	This product contains a maximum VOC content of 670 g/l.

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity	Stable under recommended transport or storage conditions.
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10.2. Chemical stability

Stability Highly volatile.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No known hazardous reactions if stored under normal conditions. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products In combustion emits toxic fumes

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General information Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation High exposures may cause an abnormal heart rhythm and prove suddenly fatal. Very high atmospheric concentrations may cause anaesthetic effects and asphyxiation. Vapours may cause drowsiness and dizziness.

Ingestion May cause soreness and redness of mouth and throat.

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating to eyes. Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards Vapours in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting. Arrhythmia (deviation from normal heart beat). Concentrating and inhaling the gas/spray can lead to abnormal heart rhythms and possibly death.

Route of entry Inhalation

Target organs Central nervous system Respiratory system, lungs

Medical symptoms Narcotic effect. Vapours may cause drowsiness and dizziness.

SECTION 12: Ecological Information

Ecotoxicity The product is not expected to be toxic to aquatic organisms. Avoid the spillage or runoff entering drains, sewers or watercourses.

12.1. Toxicity

12.2. Persistence and degradability

Persistence and degradability No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces. The product has poor water-solubility.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not known.

Ozone depletion potential

Global warming potential (GWP)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Ensure containers are empty before discarding (explosion risk).

Disposal methods Containers should be thoroughly emptied before disposal because of the risk of an explosion. Do not puncture or incinerate, even when empty. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class Full or Partially Empty Aerosol: 16 05 04, Empty Aerosol: 15 01 10 (Containing hazardous residues). Empty Aerosol: 15 01 04 (No hazardous residues).

SECTION 14: Transport information

General This product is packed in accordance with the Limited quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow the transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing they are labelled in accordance with the requirements of those regulations to show that they are transported as Limited Quantities. Aerosols not so packed must show the following.

14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2, 5F

ADR/RID label 2.1

IMDG class 2

ICAO class/division 2
ICAO subsidiary risk 2.1

Transport labels



14.4. Packing group

ADR/RID packing group #
IMDG packing group #
ICAO packing group #

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-D, S-U
Tunnel restriction code (D)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

EU legislation 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 (as amended).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Authorisations (Title VII Regulation 1907/2006) No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006) No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification procedures according to Regulation (EC) 1272/2008	Aerosol 1 - H222, H229: Weight of evidence. STOT SE 3 - H336, Eye Irrit. 2 - H319: Calculation method.
Issued by	Technical Department
Revision date	14/03/2017
Revision	4
Supersedes date	05/01/2017
SDS number	21025
Hazard statements in full	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H229 Pressurised container: may burst if heated H280 Contains gas under pressure; may explode if heated. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. 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.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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