

## SAFETY DATA SHEET

Safety Data Sheet according to regulation (EC) No 1907/2006 & 1272/2008 and amendments

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

**Product Identifier:** AEROFIX 2  
**Product Description:** Adhesive

#### RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

**Intended/Recommended Use:** Engineered materials

#### DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

**Company:** Cytec Industries Inc., 504 CARNEGIE CENTER, PRINCETON, NEW JERSEY 08540, USA.  
**For Product and all Non-Emergency Information call** 1-800/652-6013. Outside the USA and Canada call +1-973/357-3193 or your local Cytec contact point. E-mail: [custinfo@solvay.com](mailto:custinfo@solvay.com).

**Local Contact Information:** Cytec Industries Inc., Abenbury Way, Wrexham Industrial Estate, Wrexham Clwyd LL139UZ, GB  
Telephone: +44 1-97866-5200

#### EMERGENCY PHONE (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:

**Asia Pacific:**

Australia - +61 2 8014 4558 (Carechem24)  
China (PRC) - +86 0532 83889090 (NRCC) +86 512 8090 3042 (Carechem24)  
New Guinea - +61 2 8014 4558 (Carechem24)  
New Zealand - +64 9 929 1483 (Carechem24)  
India, Japan, Korea, Malaysia, Thailand - +65 3158 1074 (Carechem24 Singapore)  
India (Hindi Speaking Only) - +65 3158 1198 or 000800 100 7479 (Carechem24 Singapore)

**Canada:** 800 424 9300 (Within US,Canada) +1 (703) 527-3887 (International)

**Europe/Africa/Middle East (Carechem24 UK):**

Europe, Middle East, Africa, Israel - +44 1235 239 670  
(Arabic speaking countries) - +44 1235 239 671

**Latin America:**

Brazil - +55 11 3197 5891 (Carechem24)  
Chile - +56 2 2582 9336 (Carechem24)  
All Others - +44 (0) 1235 239 670 (Carechem24 UK)

**USA:** 800 424 9300 (Within US,Canada) +1 (703) 527-3887 (International)

### 2. HAZARDS IDENTIFICATION

#### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification according to Regulation (EC) No 1272/2008 and amendments

## 2. HAZARDS IDENTIFICATION

Aerosol Hazard Category 1  
Specific Target Organ Toxicity (STOT) - Single Exposure Hazard Category 3  
Skin Corrosion / Irritation Hazard Category 2  
Aquatic Environment Long-term Hazard Category 2

### LABEL ELEMENTS



#### Signal Word

Danger

#### Hazard Statements

H222 - Extremely flammable aerosol.  
H229 - Pressurized container: May burst if heated.  
H336 - May cause drowsiness or dizziness.  
H315 - Causes skin irritation.  
H411 - Toxic to aquatic life with long lasting effects.  
EUH066 - Repeated exposure may cause skin dryness or cracking.

#### Precautionary Statements

Precautionary statements on the label will be reduced as indicated in Regulation (EC) No 1272/2008, Article 28.

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 dust/fume/gas/mist/vapours/spray.  
P271 - Use only outdoors or in a well-ventilated area.  
P264 - Wash face, hands and any exposed skin thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P273 - Avoid release to the environment.  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P321 - Specific treatment (see supplemental first aid instructions on this label).  
P332 + P313 - If skin irritation occurs: Get medical advice/attention.  
P362 - Take off contaminated clothing.  
P391 - Collect spillage.  
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local and national regulations.

#### OTHER HAZARDS

Not applicable

#### RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance, Mixture or Article? Article

Component / CAS No.	%	EC-No	REACH Registration Number	Classification according to Regulation (EC) No 1272/2008 (CLP)	M-Factor	SVHC
Propane 74-98-6	19 - 21	200-827-9	Not available	Flam. Gas 1 (H220) U Press. Gas U		
Heptane B 92045-53-9	19 - 21	295-434-2	Not available	Carc. 1B (H350) P Muta. 1B (H340) P Asp. Tox. 1 (H304) P		
Cyclohexane 110-82-7	11 - 14	203-806-2	Not available	Flam. Liq. 2 (H225) STOT SE 3 (H336) Skin Irrit. 2 (H315) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	1	
Dimethyl ether 115-10-6	12 - 14	204-065-8	Not available	Flam. Gas 1 (H220) U Press. Gas U		
pentane 109-66-0	9 - 11	203-692-4	Not available	Flam. Gas 1 (H220) K U Press. Gas K U Flam. Liq. 2 (H225) C Carc. 1A (H350) K U Muta. 1B (H340) K U STOT SE 3 (H336) C Asp. Tox. 1 (H304) C Aquatic Chronic 2 (H411) C		
Naphtha, petroleum, heptane fraction 64742-49-0	10	265-151-9	Not available	Flam. Liq. 2 (H225) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) STOT SE 3 (H336) Aquatic Chronic 2 (H411)		
butane 106-97-8	6 - 8	203-448-7	Not available	Flam. Gas 1 (H220) C U Press. Gas C U		
Limestone (calcium carbonate - not classified) 1317-65-3	3 - 6	215-279-6	Not available	Not classified		
Isobutane 75-28-5	3 - 6	200-857-2	Not available	Flam. Gas 1 (H220) C U Press. Gas C U Carc. 1A (H350) K U Carc. 1A (H350) C S U(as Isobutane (Containing >=0.1% Butadiene)) Muta. 1B (H340) K U Muta. 1B (H340) C S U(as Isobutane (Containing >=0.1% Butadiene))		
Isopentane 78-78-4	3 - 6	201-142-8	Not available	Flam. Gas 1 (H220) K U Press. Gas K U Flam. Liq. 1 (H224) C Carc. 1A (H350) K U Muta. 1B (H340) K U STOT SE 3 (H336) C Asp. Tox. 1 (H304) C Aquatic Chronic 2 (H411) C		

See Section 16 for full text of H phrases.

## 4. FIRST AID MEASURES

### DESCRIPTION OF FIRST AID MEASURES

**Eye Contact:**

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical advice if there are persistent symptoms.

**Skin Contact:**

Remove contaminated clothing and shoes without delay. Wash immediately with plenty of water. Do not reuse contaminated clothing without laundering. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear.

**Ingestion:**

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

**Inhalation:**

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

None known

### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS

Not applicable

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## 5. FIRE-FIGHTING MEASURES

### EXTINGUISHING MEDIA

**Suitable Extinguishing Media:**

Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

### SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Thermal decomposition can lead to release of irritating gases and vapors. Potential pressure build-up may burst closed containers.

### ADVICE FOR FIREFIGHTERS

**Protective Equipment:**

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See MSDS Section 8 (Exposure Controls/Personal Protection).

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

**Environmental Precautions:**

Use appropriate containment to avoid environmental contamination.

**Methods and material for containment and cleaning up:**

Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

**References to other sections:**

See Sections 8 and 13 for additional information.

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## 7. HANDLING AND STORAGE

### PRECAUTIONS FOR SAFE HANDLING

**Precautionary Measures:** Wash thoroughly after handling. Avoid contact with eyes, skin and clothing.

**Special Handling Statements:** Containers must be bonded and grounded when pouring or transferring material. Cylinders must be handled in accordance with industry standards for compressed gases. Provide good ventilation of working area (local exhaust ventilation if necessary).

**Conditions for safe storage, including any incompatibilities:**

Store in accordance with local, state, and federal regulations.

**Storage Temperature:** Room temperature <50 °C

**Reason:** Safety.

**Storage Class (TRGS 510):** 2 B

**Specific end use(s):**

Refer to Section 1 or Exposure Scenario if applicable.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### CONTROL PARAMETERS

**106-97-8 butane**

United Kingdom: WEL (Workplace Exposure Limits)	600 ppm (TWA) 1450 mg/m <sup>3</sup> (TWA) 750 ppm (STEL) 1810 mg/m <sup>3</sup> (STEL)
Europe ILV (Indicative Limit Values):	Not established
Other Value:	Not established

**109-66-0 pentane**

United Kingdom: WEL (Workplace Exposure Limits)	600 ppm (TWA) 1800 mg/m <sup>3</sup> (TWA) 1800 ppm (STEL) 5400 mg/m <sup>3</sup> (STEL)
Europe ILV (Indicative Limit Values):	1000 ppm (TWA) 3000 mg/m <sup>3</sup> (TWA)
Other Value:	Not established

**110-82-7 Cyclohexane**

United Kingdom: WEL (Workplace Exposure Limits)	100 ppm (TWA) 350 mg/m <sup>3</sup> (TWA) 300 ppm (STEL) 1050 mg/m <sup>3</sup> (STEL)
Europe ILV (Indicative Limit Values):	200 ppm (TWA) 700 mg/m <sup>3</sup> (TWA)
Other Value:	Not established

**106-97-8 butane****115-10-6 Dimethyl ether**

United Kingdom: WEL (Workplace Exposure Limits)	400 ppm (TWA) 766 mg/m <sup>3</sup> (TWA) 500 ppm (STEL) 958 mg/m <sup>3</sup> (STEL)
Europe ILV (Indicative Limit Values):	Not established
Other Value:	Not established

**1317-65-3 Limestone (calcium carbonate - not classified)**

United Kingdom: WEL (Workplace Exposure Limits)	10 mg/m <sup>3</sup> inhalable dust (TWA) 4 mg/m <sup>3</sup> respirable dust (TWA) 30 mg/m <sup>3</sup> inhalable dust (STEL) 12 mg/m <sup>3</sup> respirable dust (STEL)
Europe ILV (Indicative Limit Values):	Not established
Other Value:	Not established

**78-78-4 Isopentane**

United Kingdom: WEL (Workplace Exposure Limits)	600 ppm (TWA) 1800 mg/m <sup>3</sup> (TWA) 1800 ppm (STEL) 5400 mg/m <sup>3</sup> (STEL)
Europe ILV (Indicative Limit Values):	1000 ppm (TWA) 3000 mg/m <sup>3</sup> (TWA)
Other Value:	Not established

Use	Route	DNEL	Units	Effects Type
Cyclohexane (110-82-7)				
Worker	Inhalation	700	mg/m <sup>3</sup>	Short term, local
Worker	Inhalation	700	mg/m <sup>3</sup>	Short term, systemic
Worker	Inhalation	700	mg/m <sup>3</sup>	Long term, local
Worker	Inhalation	700	mg/m <sup>3</sup>	Long term, systemic
Worker	Dermal	2016	mg/kg	Long term, systemic

Compartment	PNEC	Units
Cyclohexane (110-82-7)		
Fresh water	0.207	mg/L
Marine water	0.207	mg/L
Sediment (fresh water)	3.267	mg/kg
Marine water	3.267	mg/kg
Soil	2.99	mg/kg

**EXPOSURE CONTROLS****Engineering Measures:**

Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

**Respiratory Protection:**

Where exposures are below the established exposure limit, no respiratory protection is required.

Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

**Eye protection:**

Wear eye/face protection such as chemical splash proof goggles or face shield.  
Eyewash equipment and safety shower should be provided in areas of potential exposure.

**Skin Protection:**

Avoid skin contact.  
Wear impermeable gloves and suitable protective clothing.  
Since this product is absorbed through the skin, care must be taken to prevent skin contact and contamination of clothing.

**Hand protection:**

Nitrile or fluorinated rubber gloves. Consider the porosity and elasticity data of the glove manufacturer and the specific conditions in the work place. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

The chemical resistance depends on the type of product and amount of product on the glove. Therefore gloves need to be changed when in contact with chemicals.

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing.

**Additional Advice:**

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. It is recommended that a shower be taken after completion of workshift especially if significant contact has occurred. Work clothing should then be laundered prior to reuse. Street clothing should be stored separately from work clothing and protective equipment. Work clothing and shoes should not be taken home.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

<b>Colour:</b>	clear
<b>Appearance:</b>	-
<b>Odor:</b>	sweet
<b>Odor Threshold:</b>	See Section 8 for exposure limits.
<b>pH:</b>	Not available
<b>Melting Point:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable
<b>Flash point:</b>	-42 °C
<b>Evaporation Rate:</b>	Not available
<b>Flammability (solid, gas):</b>	Not available
<b>Flammable Limits (% By Vol):</b>	Not available
<b>Vapor Pressure:</b>	Not available
<b>Vapour density:</b>	Not available
<b>Specific Gravity/Density:</b>	~0.7
<b>Solubility In Water:</b>	Insoluble
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>Autoignition (Self) Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>Viscosity (Kinematic):</b>	Not available
<b>Viscosity (Dynamic):</b>	Not available

### OTHER INFORMATION

<b>Fat Solubility (Solvent-Oil):</b>	Not available
<b>Percent Volatile (% by wt.):</b>	~75
<b>Solids Content:</b>	Not available

<b>Saturation In Air (% By Vol.):</b>	Not available
<b>Acid Number (mg KOH/g):</b>	Not available
<b>Hydroxyl Value (mg KOH/g):</b>	Not applicable
<b>Volatile Organic Content (1999/13/EC):</b>	523gm/L
<b>Dissociation Constant:</b>	Not available
<b>Explosion Properties:</b>	Explosion will be caused by solvent contained in the final product.
<b>Oxidizing Properties:</b>	Not available
<b>Granulometry (Particle Size):</b>	Not available

## DUST HAZARD INFORMATION

<b>Particle Size (microns):</b>	Not applicable
<b>Kst (bar-m/sec):</b>	Not applicable
<b>Maximum Explosion Pressure (Pmax):</b>	Not applicable
<b>Dust Class:</b>	Not applicable
<b>Minimum Ignition Energy (MIE) (mJ):</b>	Not applicable
<b>Minimum Ignition Temperature (MIT) (°C):</b>	Not applicable
<b>Minimum Explosive Concentration (MEC) (g/m<sup>3</sup>):</b>	Not applicable
<b>Limiting Oxygen Concentration (LOC) (%):</b>	Not applicable

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## 10. STABILITY AND REACTIVITY

**Reactivity:** No information available

### CHEMICAL STABILITY

**Stability:** Stable

**Conditions To Avoid:** Keep away from heat, spark and flame.

### POSSIBILITY OF HAZARDOUS REACTIONS

**Polymerization:** Will not occur

**Conditions To Avoid:** Protect from heat.

**Incompatible materials:** Oxidizing agents, Sunlight, Heat, acids.

**Hazardous Decomposition Products:** aldehydes  
oxides of carbon  
ketones  
When heated to decomposition, it emits toxic fumes.  
hydrocarbons

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## 11. TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

**Likely Routes of Exposure:** Skin, Eyes, Respiratory System.

**Acute toxicity - oral:** Not classified - Based on physical form, not an expected route of exposure.

**Acute toxicity - dermal:** Not Classified - Based on physical form, not an expected route of exposure.

**Acute toxicity - inhalation:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Skin corrosion / irritation:** Causes skin irritation.

**Serious eye damage / eye irritation:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.



**Respiratory sensitization:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Skin sensitization:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Carcinogenicity:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Germ cell mutagenicity:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Reproductive toxicity:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Specific target organ toxicity (STOT) - single exposure:** May cause drowsiness or dizziness.

**Specific target organ toxicity (STOT) - repeated exposure:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Aspiration hazard:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

## PRODUCT TOXICITY INFORMATION

### ACUTE TOXICITY DATA

oral	rat	Acute LD50	>2000 mg/kg
dermal	rabbit	Acute LD50	>2000 mg/kg
inhalation	rat	Acute LC50 4 hr	>20 mg/l (Vapors)

### LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	Skin	Irritating
Acute Irritation	eye	No data

### ALLERGIC SENSITIZATION

Sensitization	Skin	Not sensitizing
Sensitization	respiratory	No data

### GENOTOXICITY

#### Assays for Gene Mutations

Ames Salmonella Assay	No data
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### OTHER INFORMATION

The product toxicity information above has been estimated.  
May Cause Nervous System Damage

### HAZARDOUS INGREDIENT TOXICITY DATA

Propane was not mutagenic in the Ames test. It was moderately irritating to rabbit skin, but non-irritating to mouse skin. Frostbite of the skin and eyes may result from contact with liquid propane. The acute effects produced by propane vapor were tested in a variety of laboratory animals. Mice exposed to 10% propane exhibited cardiac sensitization. Guinea pigs exposed to 24000-29000 ppm of vapor for 5-120 minutes exhibited irregular breathing while those exposed for the same time to 47000-55000 ppm vapor exhibited tremors (all groups) and a CNS depressant effect (greater than or equal to 5000 ppm). Stupor was observed in those guinea pigs exposed to vapors for 120 minutes. Propane, at 89%, depressed cats' blood pressure while at 93% a mildly anesthetic effect was produced. Vapor concentrations of 1, 3.3 and 15% produced hemodynamic and/or cardiovascular effects in dogs. Primates exposed to 20% propane exhibited myocardial effects and respiratory depression. Primates exposed to 750 ppm of propane for 90 days were not observed with any abnormalities or signs of toxicity. A mixture of propane aerosol and isobutane was tested for irritation in 125 human subjects two times a day for 12 weeks. No skin irritation resulted from direct contact. Humans exposed to 250-1000 ppm of propane for 1, 5, 10 minutes or 1, 2 and 8 hours per day for 1 day or 2 weeks did not exhibit any clinical signs of toxicity. The same subjects were then exposed for 2- 4 weeks to 1000 ppm of propane. Nausea, headaches and eye, nose and throat irritation resulted from this exposure. 20 deaths resulting from propane gas inhalation have been recently reported. The direct cause of death is asphyxiation from oxygen deficiency which is preceded by coma.

Acute overexposure to petroleum naphtha vapors may cause eye and throat irritation. On direct skin contact, petroleum distillate may produce a mild to severe skin irritation. Prolonged repeated exposure to petroleum naphtha vapor may cause central nervous system damage as well as heart and blood disorders. The oral LD50 in the rat for various distillates ranges from 4.5 to >25 ml/kg, and the inhalation LC50 in rats is about 15000 ppm. Aspiration of petroleum naphtha may cause chemical pneumonitis. Overexposure to vapor may cause dizziness, drowsiness, headache, and nausea.

Calcium carbonate is expected to have low oral and dermal toxicity. Dust may cause mechanical irritation of the eyes. Prolonged or repeated contact may have a drying effect on the skin and may also cause irritation (skin abrasion). Exposure to dust generated during handling or use may irritate the nose, throat and upper respiratory tract. Calcium carbonate is not expected to produce dermal sensitization. Chronic exposure to dust at concentrations exceeding the occupational exposure limits may cause pneumoconiosis (lung disease). Calcium carbonate may contain trace amounts of crystalline silica as an impurity. Chronic exposure to crystalline silica dust at concentrations above the occupational exposure limits may cause silicosis. Crystalline silica is considered a known human carcinogen by NTP.

Isobutane was not mutagenic in the Ames test. This material was mildly irritating to rabbit skin. A solution containing 22% isobutane caused mild eye irritation in rabbits. Isobutane produced anesthetic effects in mice following 25 minutes of inhalation exposure to a 35% concentration. Concentrations of 41-52% isobutane in air were lethal to mice within 2-3 minutes of exposure. Dogs exposed to acute concentrations as high as 20% exhibited some signs of respiratory depression and bronchospasms; while a concentration of 50% isobutane was lethal. Monkeys exposed to isobutane (5-10%) for 5 minutes exhibited abnormalities in cardiac and circulatory function. Humans exposed to 250-1000 ppm of isobutane for 1, 5 and 10 minutes or 1, 2 and 8 hours per day for 1 day or 2 weeks did not exhibit any signs of toxicity. The same subjects were then exposed for up to 4 weeks to 500 ppm of isobutane. There were no abnormalities observed; isobutane was readily detectable in the breath and blood of the subjects. Isobutane exerts its primary effect on the circulatory system.

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## 12. ECOLOGICAL INFORMATION

### TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

**Aquatic Chronic Toxicity:** Toxic to aquatic life with long lasting effects

The ecological assessment for this material is based on an evaluation of its components.

**MOBILITY IN SOIL**

Not available

**RESULTS OF PBT AND vPvB ASSESSMENT**

Not determined

**HAZARDOUS INGREDIENT TOXICITY DATA**

Component / CAS No.	Toxicity to Algae	Toxicity to Fish	Toxicity to Water Flea
Propane 74-98-6	Not available	Not available	Not available
Heptane B 92045-53-9	Not available	Not available	Not available
Cyclohexane 110-82-7	EC50 > 500 mg/L - Desmodosmus subspicatus (72h)	LC50 23.03 - 42.07 mg/L - Pimephales promelas (96h) static LC50 24.99 - 44.69 mg/L - Lepomis macrochirus (96h) static LC50 3.96 - 5.18 mg/L - Pimephales promelas (96h) flow- through LC50 48.87 - 68.76 mg/L - Poecilia reticulata (96h) static	Not available
Dimethyl ether 115-10-6	Not available	Not available	Not available
pentane 109-66-0	Not available	LC50 = 11.59 mg/L - Pimephales promelas (96h) LC50 = 9.87 mg/L - Oncorhynchus mykiss (96h) LC50 = 9.99 mg/L - Lepomis macrochirus (96h)	EC50 = 9.74 mg/L - Daphnia magna (48h)
Naphtha, petroleum, heptane fraction 64742-49-0	Not available	Not available	EC50 < 0.26 mg/L - Daphnia magna (48h) Static
butane 106-97-8	Not available	Not available	Not available
Limestone (calcium carbonate - not classified) 1317-65-3	Not available	Not available	Not available
Isobutane 75-28-5	Not available	Not available	Not available
Isopentane 78-78-4	Not available	Not available	EC50 = 2.3 mg/L - Daphnia magna (48h)

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

The Company encourages the recycle, recovery and reuse of materials, where permitted. If disposal is necessary, The Company recommends that organic materials, especially when classified as hazardous waste, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

## 14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

### ADR/RID/ADN

Dangerous Goods? X  
Proper Shipping Name: Aerosols, flammable  
Class: 2.1  
UN Number: UN1950  
Transport Label Required: Flammable gas  
Tunnel restriction code: D  
Comments: Not intended for shipment by inland waterways in tank vessels.

### IMO

Dangerous Goods? X  
Proper Shipping Name: Aerosols  
Hazard Class: 2.1  
UN Number: UN1950  
Transport Label Required: Flammable gas

### ICAO / IATA

Dangerous Goods? X  
Proper Shipping Name: Aerosols, flammable  
Hazard Class: 2.1  
UN Number: UN1950  
Transport Label Required: Flammable gas

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## 15. REGULATORY INFORMATION

### SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

**Ozone Depleting Substances (Regulation (EC) No 1005/2009):** Not applicable  
**Persistent Organic Pollutants (Regulation (EC) No 850/2004):** Not applicable  
**Prior Informed Consent (Regulation (EC) No 689/2008):** Not applicable  
**Substances subject to Authorization (Annex XIV of Regulation (EC) No 1907/2006):** Not applicable  
This product is defined as an article according to REACH and therefore not subject to Authorization.

**Substances subject to Restrictions for certain applications(Annex XVII of Regulation(EC)No 1907/2006):**

Yes

Refer to Annex XVII of REACH for details of the restricted applications.

Cyclohexane (11 - 14 %)

This substance is restricted under item 57. This substance is a flammable restricted for aerosols under item 40.

butane (6 - 8 %)

This is a carcinogen substance restricted under item 28. This is a mutagen substance restricted under item 29. This substance is a flammable restricted for aerosols under item 40.

Isobutane (3 - 6 %)

This is a carcinogen substance restricted under item 28. This is a mutagen substance restricted under item 29. This substance is a flammable restricted for aerosols under item 40.

Heptane B (19 - 21 %)

This is a carcinogen substance restricted under item 28. This is a mutagen substance restricted under item 29.

Isopentane (3 - 6 %)

This substance is a flammable restricted for aerosols under item 40.

pentane (9 - 11 %)

This substance is a flammable restricted for aerosols under item 40.

Dimethyl ether (12 - 14 %)

Cyclohexane (11 - 14 %)

This substance is a flammable restricted for aerosols under item 40.

Naphtha, petroleum, heptane fraction (10 %)

This substance is a flammable restricted for aerosols under item 40.

Propane (19 - 21 %)

This substance is a flammable restricted for aerosols under item 40.

**Water Endangering Class (Germany):** 3 according to VwVwS, 17.05.1999

### Inventory Information

**European Economic Area (including EU):** This product is an article that does not intentionally release substances under normal conditions of use and is therefore exempt from the registration requirements under the REACH Regulation (EC) No. 1907/2006.

**United States (USA):**

All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

**Canada:**

All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**Australia:** All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

**Korea:** All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

**Philippines:** All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

### CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out.

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## 16. OTHER INFORMATION

**Reasons for Issue:** Revised Section 1

**Date Prepared:** 02-Feb-2017

**Date of last significant revision:** 02-Feb-2017

Classification methods include one or more of the following: use of specific product data, read-across data, modeling, professional judgment or a component based evaluation.

### Component Hazard Phrases

Propane

H220 - Extremely flammable gas.

Heptane B

H304 - May be fatal if swallowed and enters airways.

H340 - May cause genetic defects.

H350 - May cause cancer.

#### Cyclohexane

H225 - Highly flammable liquid and vapour.

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.

#### Dimethyl ether

H220 - Extremely flammable gas.

#### pentane

H225 - Highly flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H336 - May cause drowsiness or dizziness.

H411 - Toxic to aquatic life with long lasting effects.

#### Naphtha, petroleum, heptane fraction

H225 - Highly flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H336 - May cause drowsiness or dizziness.

H411 - Toxic to aquatic life with long lasting effects.

#### butane

H220 - Extremely flammable gas.

#### Isobutane

H220 - Extremely flammable gas.

#### Isopentane

H224 - Extremely flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H336 - May cause drowsiness or dizziness.

H411 - Toxic to aquatic life with long lasting effects.

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