# JCP

# **JCP CONSTRUCTION PRODUCTS**

# **B2 Expanding Foam**

# Data Sheet

Base Polyurethane

Consistency Stable Foam, Thixotropic

Curing system Moisture Cure Skin Formation (20°C/65%R.H.) Ca. 8 minutes

Drying Time (20°C/65%R.H.)

Dust free after 20-25 minutes

Curing Rate (20°C/65%R.H.)

1 Hour for 30mm bead

Yield 1000ml yields 35-40 L cured foam

Shrink None
Post expansion None

Cellular Structure Ca. 70-80% closed cells

Specific Gravity

Ca. 25kg/m³ (extruded, fully cured)

-40°C to +90°C when cured

B2

Colour Champagne

Fire Class (DIN4102 Part2)

Insulation Factor Ca. 31 mW/m. K

Shear Strength (DIN53427) 12 N/cm<sup>2</sup>
Pressure Strength (DIN534210 3 N/cm<sup>2</sup>
Bowing Strength (DIN53423) 7 N/cm<sup>2</sup>
Water Absorption (DIN53429) 1% Vol.

Acoustic Rating  $R_{ST,W} = 58dB$ 

#### **Product**

JCP Gun Grade and Hand Held B2 Foam with CFC free propellant is a one component, self-expanding, ready to use polyurethane foam. It contains CFC free propellants which are completely harmless to the ozone layer. It has a firing rating to B2 (DIN 4102-Part 2) and has been tested and approved for sound proofing by "ift Rosenheim"

#### **Characteristics**

- Excellent adhesion on most substrates (except PE, PP and Teflon)
- · High thermal and acoustic insulation
- Very good filling capacities
- · Excellent mounting capacities
- Excellent stability (no shrink or post expansion)
- Very precise application with gun applied system

#### **Application Areas**

Installing of window and door frames.
Filling of cavities
Sealing of all openings in roof construction
Creation of a soundproof screen
Sealing around pipes and cables
Improving thermal insulation in cooling
systems

#### **Packaging**

net

### **Shelf Life**

12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C.

### **SALES OFFICES**

Dartford	01322 277733	Stone	01785 819819
Elland	01422 370121	Swindon	01793 527829
Milton Keynes	01908 330050		



# JCP CONSTRUCTION

# **JCP CONSTRUCTION PRODUCTS**

# **B2** Expanding Foam

### **Application**

Shake the aerosol can for at least 20 seconds. Fit the gun on the adaptor or screw on nozzle. Moisten surfaces with a water spray prior to application. Fill holes and cavities for 65%, as the foam will expand. Repeat shaking during application. If several layers are required repeat moistening with water between each layer. Fresh foam can be removed using JCP Polyurethane Cleaner or acetone. Cured foam can only be removed mechanically. Working temperature +5°C to +35°C. (+20°C to +25°C recommended)

### **Health and Safety recommendations**

- · Apply the usual industrial hygiene
- · Wear gloves and safety goggles
- Removed cured foam by mechanical means only, never burn away.
- · Consult the label for more information

#### Remarks

- Work in layers and moisten after each layer
- Cured PU-foam must be protected from UV-radiation by painting or applying a layer of sealant (silicone, MS Polymer, acrylic and PU sealant)
- For fire barrier applications foam must be used with JCP Fire Rated Silicone or Intumescent Mastic.
- Follow the cleaning and storage instructions included in the Applicator Gun box.

### **Approvals**

- Fire Rating B2: Prüfzeugnis P-SAC 02/1V-010, MFPA Leipzig
- Prüfzeugnis Nr167 18612 to DIN 52210 "Fugenschalldämmung", ift Rosenheim



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# Safety data sheet according to 1907/2006/EC, Article 31

Printing date 21.08.2015 Version number 33 Revision: 21.08.2015

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

- · Product identifier
- · Trade name: Grade B2 Gun Applied Fire Rated Foam
- · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture

Construction chemicals

Assembly foam

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

JCP Construction Products

Unit 14, Teddington Industrial Estate

Teddington,

Middlesex. TW11 9BQ

- · Further information obtainable from: jcpenquiries@owlett-jaton.com www.jcpconstructionproducts.com
- · Emergency telephone number: +44 (0)208 943 1800 8.30am-5.00pm Monday to Friday

### **SECTION 2: Hazards identification**

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



### GHS08 health hazard

Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 2	H351	Suspected of causing cancer.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.



### GHS07

Acute Tox. 4	H332	Harmful if inhaled.	
Skin Irrit. 2	H315	Causes skin irritation.	
Eye Irrit. 2	H319	Causes serious eye irritation.	
Skin Sens. 1	H317	May cause an allergic skin reaction.	
STOT SE 3	H335	May cause respiratory irritation.	
Lact.	H362	May cause harm to breast-fed children.	
Aquatic Chronic 4	H413	May cause long lasting harmful effects to aquatic life.	

Additional information:

Classification of the preparation with attributed H413 phrase, taking into account the content od C14-C17 chlorinated alkanes, was made on the basis of acute toxicology tests; FEICA Position Paper 17.03.2014.

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# Safety data sheet according to 1907/2006/EC, Article 31

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Trade name: Grade B2 Gun Applied Fire Rated Foam

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- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms







GHS02 GHS07 GHS0

· Signal word Danger

### Hazard-determining components of labelling:

diphenylmethanediisocyanate, isomers and homologues chlorinated paraffins, C14-17

#### Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H332 Harmful if inhaled. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.
 H362 May cause harm to breast-fed children

H362 May cause harm to breast-fed children.
H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H413 May cause long lasting harmful effects to aquatic life.

### Precautionary statements

P102 Keep out of reach of children.

P263 Avoid contact during pregnancy/while nursing.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of water.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

### · Additional information:

Do not pierce or burn, even after use.

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

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

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

Persons already sensitised to diisocyanates may develop allergic reactions when using this product.

- -Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
- -This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used EUH204 Contains isocyanates. May produce an allergic reaction.
- Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.

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· vPvB: Not applicable.

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## **SECTION 3: Composition/information on ingredients**

- · Chemical characterisation: Mixtures
- · **Description:** Mixture: consisting of the following components.

Dangerous components:		
CAS: 9016-87-9	diphenylmethanediisocyanate, isomers and homologues  Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	30.0 - 60.0%
CAS: 13674-84-5 Reg.nr.: 01-2119486772-26-xxxx	tris(2-chlorisopropyl)-phosphate  Output Description:	< 25.0%
CAS: 85535-85-9 EINECS: 287-477-0 Reg.nr.: 01-2119519269-33-xxxx	chlorinated paraffins, C14-17  Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Lact., H362	< 20.0%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-21194869440-21-xxxx	propane Flam. Gas 1, H220; Press. Gas C, H280	< 15.0%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-31-xxxx	butane ♦ Flam. Gas 1, H220; Press. Gas C, H280	< 15.0%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane Flam. Gas 1, H220; Press. Gas C, H280	< 15.0%
CAS: 115-10-6 EINECS: 204-065-8 Reg.nr.: 01-2119472128-37-0001	dimethyl ether     Flam. Gas 1, H220; Press. Gas C, H280	< 10.0%

<sup>·</sup> Additional information: For the wording of the listed risk phrases refer to section 16.

## **SECTION 4: First aid measures**

- Description of first aid measures
- · After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· After skin contact:

Remove uncured foam using a piece of cloth and an unagressive solvent, e.g. ethanol. Wash your hands and the cleaned skin surface using soapy water. Cured foam can be removed mechanically with the use of a brush, soap and plenty of water. Use protective cream after skin surface has been cleaned.

- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Do not induce vomiting; call for medical help immediately.

Rinse out mouth and then drink plenty of water.

- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.

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· Indication of any immediate medical attention and special treatment needed No further relevant information available.

## **SECTION 5: Firefighting measures**

- Extinguishing media
- · Suitable extinguishing agents:

Carbon dioxide

Fire-extinguishing powder

Foam

Water spray

Use fire extinguishing methods suitable to surrounding conditions.

· Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.

Formation of toxic gases is possible during heating or in case of fire.

- Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information Cool endangered receptacles with water spray.

### **SECTION 6: Accidental release measures**

· Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.

Wear protective clothing.

Do not breathe gas/fumes/vapour/spray.

Ensure adequate ventilation

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Uncured foam adheres easily, hence it should be removed with caution. Remove instantly using a piece of cloth and solvents, e.g. acetone, alcohol. Remove cured foam mechanically.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections See Section 13 for disposal information.

# **SECTION 7: Handling and storage**

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Do not pierce or burn even after use. Use only as directed on the label.

Do not mix with any other chemical products

Information about fire - and explosion protection:

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 ℃, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray onto a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

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Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packagings with pressurised containers.

This product is subject to regulations governing the storage of highly flammable aerosol products

Storage rooms should be equipped with heat and smoke detectors.

Electrical equipment should be explosion-proof.

### Information about storage in one common storage facility:

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

Store away from reducing agents.

Store away from oxidising agents.

Store away from foodstuffs.

Store away from plastic, rubber, aluminum, light-metals

## · Further information about storage conditions:

Store receptacle in a well ventilated area.

Store in vertical position in closed original containers.

Store at temperature from +5 °C to +30 °C.

Protect from frost.

Store under lock and key and out of the reach of children.

Protect from heat and direct sunlight.

· Specific end use(s) No further relevant information available.

### **SECTION 8: Exposure controls/personal protection**

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters

### Ingredients with limit values that require monitoring at the workplace:

### CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

WEL | Short-term value: 0.07 mg/m<sup>3</sup>

Long-term value: 0.02 mg/m<sup>3</sup>

Sen; as -NCO

#### CAS: 106-97-8 butane

WEL | Short-term value: 1810 mg/m³, 750 ppm

Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

### CAS: 115-10-6 dimethyl ether

WEL | Short-term value: 958 mg/m³, 500 ppm

Long-term value: 766 mg/m³, 400 ppm

- · Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

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· Respiratory protection:

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In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

### · Material of gloves

Polyethylene gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

### Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

### **SECTION 9: Physical and chemical properties**

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Rapidly curing foam dispensed by gaseous propellant from an aerosol

container.

Colour: Light yellow
Odour: Characteristic

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Not applicable, as aerosol.

· Flash point: < 0 °C

· **Self-igniting:** > +350 °C (propelant)

• Danger of explosion: Heating may cause an explosion.

· Explosion limits:

**Lower:** 1.5 Vol % **Upper:** 11.0 Vol %

· **Vapour pressure:** >500 kPa (in the container)

< 1\*10-5 mmHg w 25 ℃ (MDI)

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· Density at 20 °C: ≤ 1.3 (PMDI) g/cm³

· Solubility in / Miscibility with

water: Insoluble.

reacts with water

• Other information No further relevant information available.

## **SECTION 10: Stability and reactivity**

- · **Reactivity** No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

Strongly reacts with water and other substances containing an active hydrogen atom

· Hazardous decomposition products: No dangerous decomposition products known.

## **SECTION 11: Toxicological information**

- · Information on toxicological effects
- · Acute toxicity

Harmful if inhaled.

· LD/LC50	values re	elevant for classification:
CAS: 1367	74-84-5 tri	s(2-chlorisopropyl)-phosphate
Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4 h	>0.5 mg/l (rat)
CAS: 101-	68-8 4,4'-ı	methylenediphenyl diisocyanate
Oral	LD50	9200 mg/kg (rat)
Inhalative	LC50/4 h	178 mg/l (rat)
· Duima a m r i		da ata

- · Primary irritant effect:
- Skin corrosion/irritation

Causes skin irritation.

· Serious eve damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

May cause harm to breast-fed children.

STOT-single exposure

May cause respiratory irritation.

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· STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

· Aspiration hazard Based on available data, the classification criteria are not met.

## **SECTION 12: Ecological information**

- · Toxicity
- · Aquatic toxicity:

#### CAS: 85535-85-9 chlorinated paraffins, C14-17

EC50 | >1000mg/l/48h (daphnia) (20%MCCP's)

>1000mg/l/72h (algae) (20%MCCP's)

NOEC >1000 mg/l (algae) (20%MCCP's)

CAS: 13674-84-5 tris(2-chlorisopropyl)-phosphate

EC50 47 mg/kg (algae)

- · Persistence and degradability Not biodegradable
- · Behaviour in environmental systems:
- · Bioaccumulative potential Does not accumulate in organisms
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

### **SECTION 13: Disposal considerations**

- · Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Europea	· European waste catalogue	
07 02 08*	other still bottoms and reaction residues	
07 02 13	waste plastic	
15 01 05	composite packaging	

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

## **SECTION 14: Transport information**

- · UN-Number
- · ADR, IMDG, IATA

1950

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Trade name: Grade B2 Gun Applied Fire Rated Foam

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· UN proper shipping name	
ADR	AREOZOLE
· IMDG, IATA	AEROSOLS
· Transport hazard class(es)	
· ADR	
· Class	2 5F Gases.
· Label	2.1
· IMDG, IATA	
· Class	2 5F Gases.
· Label	2.1
· Packing group	
· ADR, IMDG	Void
· Environmental hazards:	
· Marine pollutant:	No
Special precautions for user	Warning: Gases.
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U
Transport in bulk according to Annex	ι II of
Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	LQ2
Transport category	2
· Remarks:	Exemption from ADR provisions by LQ principal (rule 3.4.
	<ul> <li>Inner packaging, max. 1 liter in capacity; outer packagi</li> <li>max. gross weight of 30kg</li> </ul>
	<ul> <li>Inner packaging, max. 1 liter in capacity, based</li> </ul>
	common ground and covered with shrink film – max. groweight of 20kg.

# **SECTION 15: Regulatory information**

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

No further relevant information available.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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### **Relevant phrases**

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H362 May cause harm to breast-fed children.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### Recommended restriction of use

The information stated above is based on current knowledge and applies to the product in the form in which it is used. Data concerning this product is presented in order to fulfill safety requirements and not to guarantee its specific properties

In cases when application conditions are not subject to manufacturer's control, the responsibility for safe product use and obeying law regulations in particular, lies on the user's side.

Information in the appropriate technical data sheet of product.

### · Department issuing MSDS: Product safety department.

Contact: msds@selena.com

### Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas C: Gases under pressure: Compressed gas Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 2: Carcinogenicity, Hazard Category 2
Lact.: Reproductive toxicity, Additional category, Effects on or via lactation

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1 Aquatic Chronic 4: Hazardous to the aquatic environment - Chronic Hazard, Category 4

## \* Data compared to the previous version altered.

1) So far unclassified substance CAS: 13674-84-5 added in pt 3; MDI reclassification

- 2) Change in classification of compound in pt 2
- 3) Change in storage temperature in pt 7
- 4) Pts 11 & 12 enhanced by data for new substances
- 5) information about collection of empty containers in 13 pt have been removed.
- 6) Change in pt 15 resulting from compound reclassification

Update date: 07.05.2010