

1 Identification

- **Product identifier**
- **Trade name:** *40463 Low VOC Undercoating*
- **Article number:** 40463
- **Application of the substance / the mixture** *Coating*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SEM Products Inc.
1685 Overview Drive
Rock Hill, SC 29730
803 207 8225
- **Information department:**
cust_care@semproducts.com : SEM Products, Inc. 1685 Overview Dr. Rock Hill, SC 29730 : phone 1-800-831-1122, M - TH 7am - 4pm EDT
- **Emergency telephone number:** *CHEMTREC 1-800-424-9300*

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 GHS04 Flame, Gas cylinder

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 1 H372 Causes damage to the central nervous system through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

(Contd. on page 2)

Trade name: 40463 Low VOC Undercoating

(Contd. of page 1)

STOT SE 3 H335 May cause respiratory irritation.

· **Label elements**

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS04 GHS06 GHS07 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

Asphalt

Solvent naphtha (petroleum), light aliph.

toluene

Solvent naphtha (petroleum), medium aliph.

· **Hazard statements**

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

H301 Toxic if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H340 May cause genetic defects.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H335 May cause respiratory irritation.

H372 Causes damage to the central nervous system through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P251 Do not pierce or burn, even after use.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

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

P280 Wear protective gloves.

P280 Wear eye protection / face protection.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

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

P312 Call a POISON CENTER/doctor if you feel unwell.

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

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P330 Rinse mouth.

(Contd. on page 3)

Trade name: 40463 Low VOC Undercoating

(Contd. of page 2)

- P331 Do NOT induce vomiting.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P405 Store locked up.
- P410+P403 Protect from sunlight. Store in a well-ventilated place.
- 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.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:**

Mixture: consisting of the following components.

Weight percentages

· **Dangerous components:**

8052-42-4	Asphalt	30 - 40%
68476-86-8	Petroleum gases, liquefied, sweetened	13 - 30%
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	7 - 10%
64742-88-7	Solvent naphtha (petroleum), medium aliph.	5 - 7%
64742-89-8	Solvent naphtha (petroleum), light aliph.	5 - 7%
14807-96-6	Talc	1.5 - 5%
68911-87-5	ALKYL QUATERNARY AMMONIUM MONTMORILLONITE	1.5 - 5%
7727-43-7	barium sulphate, natural	1.5 - 5%
108-88-3	toluene	1.5 - 5%
79-20-9	methyl acetate	1.5 - 5%
67-64-1	acetone	1.5 - 5%
67-56-1	methanol	1-1.5%

(Contd. on page 4)



Trade name: 40463 Low VOC Undercoating

1333-86-4 Carbon black

(Contd. of page 3)

≤1%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.

(Contd. on page 5)



Trade name: 40463 Low VOC Undercoating

(Contd. of page 4)

- Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
Do not spray on a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

· **Components with limit values that require monitoring at the workplace:**

8052-42-4 Asphalt

REL	Ceiling limit value: 5* mg/m ³ *15-min; See Pocket Guide App. A
TLV	Long-term value: 0.5* mg/m ³ *inh. fraction; as benzene-soluble aerosol; BEIp

7727-43-7 barium sulphate, natural

PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV	Long-term value: 5* mg/m ³ *inhalable fraction; E

108-88-3 toluene

PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm
TLV	Long-term value: 75 mg/m ³ , 20 ppm BEI

79-20-9 methyl acetate

PEL	Long-term value: 610 mg/m ³ , 200 ppm
REL	Short-term value: 760 mg/m ³ , 250 ppm Long-term value: 610 mg/m ³ , 200 ppm
TLV	Short-term value: 757 mg/m ³ , 250 ppm Long-term value: 606 mg/m ³ , 200 ppm

(Contd. on page 6)



Trade name: 40463 Low VOC Undercoating

(Contd. of page 5)

67-64-1 acetone

PEL Long-term value: 2400 mg/m³, 1000 ppm
REL Long-term value: 590 mg/m³, 250 ppm
TLV Short-term value: 1187 mg/m³, 500 ppm
Long-term value: 594 mg/m³, 250 ppm
BEI

67-56-1 methanol

PEL Long-term value: 260 mg/m³, 200 ppm
REL Short-term value: 325 mg/m³, 250 ppm
Long-term value: 260 mg/m³, 200 ppm
Skin
TLV Short-term value: 328 mg/m³, 250 ppm
Long-term value: 262 mg/m³, 200 ppm
Skin; BEI

Ingredients with biological limit values:

8052-42-4 Asphalt

BEI -
Medium: urine
Time: end of shift at end of workweek
Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)

108-88-3 toluene

BEI 0.02 mg/L
Medium: blood
Time: prior to last shift of workweek
Parameter: Toluene

0.03 mg/L
Medium: urine
Time: end of shift
Parameter: Toluene

0.3 mg/g creatinine
Medium: urine
Time: end of shift
Parameter: o-Cresol with hydrolysis (background)

67-64-1 acetone

BEI 50 mg/L
Medium: urine
Time: end of shift
Parameter: Acetone (nonspecific)

67-56-1 methanol

BEI 15 mg/L
Medium: urine
Time: end of shift
Parameter: Methanol (background, nonspecific)

Additional information: The lists that were valid during the creation were used as basis.

(Contd. on page 7)

Trade name: 40463 Low VOC Undercoating

(Contd. of page 6)

- **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.
 Store protective clothing separately.
 Avoid contact with the eyes and skin.*
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**
*Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*
- **Material of 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

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

Form:	Aerosol
Color:	According to product specification
- **Odor:** Characteristic
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	139 °C
- **Flash point:** -103 °C

(Contd. on page 8)



Trade name: 40463 Low VOC Undercoating

(Contd. of page 7)

· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	265 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	In use, may form flammable/explosive vapour-air mixture.
· Explosion limits:	
Lower:	1.9 Vol %
Upper:	9.5 Vol %
· Vapor pressure:	Not determined.
· Density at 20 °C:	0.85631 g/cm ³
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	51.1 %
Water:	0.1 %
VOC content:	38.6 %
	365.8 g/l / 3.05 lb/gl
Solids content:	49.9 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

USA

(Contd. on page 9)



Trade name: 40463 Low VOC Undercoating

(Contd. of page 8)

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

· LD/LC50 values that are relevant for classification:

64742-88-7 Solvent naphtha (petroleum), medium aliph.

Oral	LD50	>6500 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)
Inhalative	LC50/4 h	>14 mg/l (rat)

108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

- Primary irritant effect:
 - on the skin: Irritant to skin and mucous membranes.
 - on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic
Irritant

The product can cause inheritable damage.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

8052-42-4	Asphalt	2B
14807-96-6	Talc	2B
108-88-3	toluene	3
1333-86-4	Carbon black	2B

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

68911-87-5 ALKYL QUATERNARY AMMONIUM MONTMORILLONITE

12 Ecological information

- Toxicity
 - Aquatic toxicity: No further relevant information available.
 - Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - Bioaccumulative potential No further relevant information available.
 - Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.

(Contd. on page 10)



Trade name: 40463 Low VOC Undercoating

(Contd. of page 9)

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

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1950
- **UN proper shipping name**
- **DOT, IATA** Aerosols, flammable
- **ADR** 1950 Aerosols
- **IMDG** AEROSOLS

· **Transport hazard class(es)**

· **DOT**



- **Class** 2.1
- **Label** 2.1

· **ADR**



- **Class** 2 5F Gases
- **Label** 2.1

· **IMDG, IATA**



- **Class** 2.1
- **Label** 2.1

(Contd. on page 11)



Trade name: 40463 Low VOC Undercoating

(Contd. of page 10)

· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user · EMS Number: · Stowage Code	Warning: Gases F-D,S-U SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information: · DOT · Quantity limitations	On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg
· ADR · Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

15 Regulatory information

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

· Section 355 (extremely hazardous substances):	
None of the ingredient is listed.	
· Section 313 (Specific toxic chemical listings):	
14807-96-6	Talc
7727-43-7	barium sulphate, natural
108-88-3	toluene
67-56-1	methanol

(Contd. on page 12)

Trade name: 40463 Low VOC Undercoating

(Contd. of page 11)

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

8052-42-4 Asphalt

1333-86-4 Carbon black

· **Chemicals known to cause reproductive toxicity for females:**

108-88-3 toluene

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

108-88-3 toluene

67-56-1 methanol

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

7727-43-7 barium sulphate, natural

D, CBD(inh), NL(oral)

108-88-3 toluene

II

67-64-1 acetone

I

· **TLV (Threshold Limit Value established by ACGIH)**

8052-42-4 Asphalt

A4

14807-96-6 Talc

A4

108-88-3 toluene

A4

67-64-1 acetone

A4

1333-86-4 Carbon black

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

8052-42-4 Asphalt

67-56-1 methanol

1333-86-4 Carbon black

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS04 GHS06 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Asphalt

Solvent naphtha (petroleum), light aliph.

toluene

Solvent naphtha (petroleum), medium aliph.

· **Hazard statements**

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

(Contd. on page 13)



Trade name: 40463 Low VOC Undercoating

(Contd. of page 12)

- H301 Toxic if swallowed.*
- H315 Causes skin irritation.*
- H319 Causes serious eye irritation.*
- H340 May cause genetic defects.*
- H350 May cause cancer.*
- H361 Suspected of damaging fertility or the unborn child.*
- H335 May cause respiratory irritation.*
- H372 Causes damage to the central nervous system through prolonged or repeated exposure.*
- H304 May be fatal if swallowed and enters airways.*

· Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.*
- P251 Do not pierce or burn, even after use.*
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.*
- P211 Do not spray on an open flame or other ignition source.*
- P280 Wear protective gloves.*
- P280 Wear eye protection / face protection.*
- P264 Wash thoroughly after handling.*
- P270 Do not eat, drink or smoke when using this product.*
- P271 Use only outdoors or in a well-ventilated area.*
- P201 Obtain special instructions before use.*
- P202 Do not handle until all safety precautions have been read and understood.*
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- P321 Specific treatment (see on this label).*
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.*
- P312 Call a POISON CENTER/doctor if you feel unwell.*
- P308+P313 IF exposed or concerned: Get medical advice/attention.*
- P332+P313 If skin irritation occurs: Get medical advice/attention.*
- P337+P313 If eye irritation persists: Get medical advice/attention.*
- P314 Get medical advice/attention if you feel unwell.*
- P330 Rinse mouth.*
- P331 Do NOT induce vomiting.*
- P302+P352 IF ON SKIN: Wash with plenty of water.*
- P362+P364 Take off contaminated clothing and wash it before reuse.*
- P405 Store locked up.*
- P410+P403 Protect from sunlight. Store in a well-ventilated place.*
- 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.*
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

· National regulations:

· Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

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

USA

(Contd. on page 14)

Trade name: 40463 Low VOC Undercoating

(Contd. of page 13)

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.

· **Department issuing SDS:** Environment protection department.

· **Contact:** Steve Gaver (sgaver@semproducts.com)

· **Date of preparation / last revision** 02/22/2016 / 10

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas: Gases under pressure: Compressed gas

Acute Tox. 3: Acute toxicity, Hazard Category 3

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

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

Muta. 1B: Germ cell mutagenicity, Hazard Category 1B

Carc. 1B: Carcinogenicity, Hazard Category 1B

Repr. 2: Reproductive toxicity, Hazard Category 2

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

STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

· *** Data compared to the previous version altered.**