# Safety data sheet COLLACRYL KD

## SECTION 1. Identification of the mixture and of the company/undertaking

### 1.1 Product identifier

Commercial name: COLLACRYL KD

## 1.2 Relevant identified uses of the mixture and uses advised against

Intended use: Adhesive for bonding of plastic materials

Industrial and professional use

Not intended use: Private consumer

Motivation of

adviced against use: Dangerous product for the presence of substances subject to

professional limits of exposure. For further information refer to

Annex Exposure Scenarios.

## 1.3 Details of Safety Data Sheet supplier

Manufacturer: PLASTIDITE S.P.A. Address: Trieste ( Italy )

34018 San Dorligo della Valle

via Travnik 12

Phone +39 040 820144 Fax +39 040 381172

E-Mail: plastidite@plastidite.com Compilation manager : Mr. G.Tlustos E-Mail: plastidite@plastidite.com

## 1.4 Emergency telephone number

European emergency number: 112



#### **SECTION 2. Hazards identification**

### 2.1 Mixture classification

## 2.1.1 Classification according to Regulation EC 1272-2008

The mixture is classified as hazardous.

Highly flammable liquid and vapours	Flammable Liquid	2	H 225
Causes skin irritation	Skin Irrit	2	H 315
Causes serious eye irritation	Eye Irrit	2	H 319
May cause drowsiness or dizziness			H 336
Suspected of causing cancer	CARC	2	H 351
May cause damage to organs through			
prolonged or repeated exposure			
if inhaled or if swallowed	STOT RE	2	H 373

## 2.1.2 Classification according to Regulation EC 1999-45

Highly flammable		R 11
Harmful if swallowed		R 22
Limited evidence of a carcinogenic effect	CARC Cat. 3	R 40

#### 2.2 Label elements

Labelling according to Regulation EC 1272-2008

GHS hazard pictograms







Signal word: Danger

Hazard statements: H 225 Highly flammable liquid and vapour

H 315 Causes skin irritation

H 319 Causes serious eye irritation H 336 May cause drowsiness or dizziness H 351 Suspected of causing cancer

H 373 May cause damage to organs through prolonged or repeated

exposure if inhaled or if swallowed

Precautionary statements:

Prevention: P 201 Obtain special instructions before use

P 210 Keep away from heat/sparks/open flames/heated surfaces.

Do not smoke

P 260 Do not breathe gas / fume / vapours / spray P 280 Wear protective gloves / protective clothing /eye

protection / face protection

Reaction: P 308 If exposed or concerned: get medical advice / attention (P 313)

Storage: P 404 Store in a closed container

Disposal: P 501 Dispose of contents/container according to local regulation Additional information: EUH 066 Repeated exposure can cause dryness or skin chaps



#### 2.3 Other hazards

The mixture satisfies the evaluation criteria for PBT and vPvB substances in accordance with annex XIII of EC Regulation 1907-2006 ( REACH ) modified by Regulation EC 253-201.

No substance classified PBT (Persistent, Bioaccumulating and Toxic). No substance classified vPvB (very persistent and very Bioaccumulating).

No substance of the product is present in the "Candidate List" referred to in Annex XIV to Regulation EC 143-2011 ( SVHC ).

## **SECTION 3. Composition/Information on ingredients**

#### 3.1 Mixtures

## 3.1.1 Description of the mixture

Acrylic copolymer solution based on organic solvents and additives.

## 3.1.2 Hazardous ingredients

N° CAS CE REACH	% in weight	Substance name	Classification 1272-2008 CE (CLP) Phrase	Category
75-09-2 200-838-9 01-2119480404-41	55 - 65	dichloromethane	H 351 CARC H 373 STOT RE	2 2
141-78-6 205-500-4 01-2119475103-46	15 - 25	ethyl acetate	H 225 Flammable Liquid H 319 Eye Irritating H 336 STOT SE	2 2 3

H 225 Highly flammable liquid and vapour

### **SECTION 4. First aid measures**

## 4.1 Description of first aid measures

#### 4.1.1 General notes

In case of doubt, or when symptoms persist, contact a doctor. Effects after the exposure may be possible. It is advisable to move the exposed person to fresh air. Remove contaminated clothing and shoes. The person who provides the first aids has preferably to wear gloves. Do not drink nor eat nor smoke.

#### 4.1.2 Inhalation

Remove the victim to fresh air and keep at rest and warm. Keep a position comfortable for breathing. If exposed or concerned: get medical advice / attention.

#### 4.1.3 Skin contact

Remove contaminated clothing and wash with water and soap.

H 319 Causes serious eye irritation

H 336 May cause drowsiness or dizziness

H 351 Suspected of causing cancer

H 373 May cause damage to organs through prolonged or repeated exposure if inhaled or if swallowed



In case of persistent skin irritation contact a doctor. Delayed effects to exposure may be possible. Same procedure for the hair.

#### 4.1.4 Eye contact

Immediately rinse with lukewarm water with eyelids well open. Wash the hands with water and soap and remove possible contact lenses if possible. In case of persistent irritation contact a doctor.

#### 4.1.5 Ingestion

Rinse the mouth, do not induce vomiting. Request medical assistance.

## 4.2 Main symptoms and effects both acute and delayed

Nausea, diarrhea, headache, daze, skin and eye irritation, possible respiratory irritation.

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

If exposed or concerned: get medical advice / attention.

Symptomatic treatment : adrenaline and similar sympathomimetic drugs should be avoided following exposure as

cardic arythmia may result with possible subsequent cardiac arrest.

Gastric lavage may be effective when performed within 4 hours of ingestion.

## **SECTION 5. Firefighting measures**

## 5.1 Extinguishing media

## 5.1.1 Suitable extinguishing media

Foam, dry powder or CO2, water spray. Possible cooling with water of heat exposed containers.

#### 5.1.2 Unsuitable extinguishing media

Direct water. Dry powder extinguishers containing sodium or potassium bicarbonate.

#### 5.2 Special hazards arising from the substance or mixture

The product and its flammable vapours. In the event of fire, carbon monoxide, carbon dioxide, chloridric acid, phosgene and organic products of decomposition may be released.

#### 5.3 Advice for firefighters

Use the following protections:

Self-Contained Breathing Apparatus (SCBA) with chemical-resistant gloves. Anti-accident boots resistant to solvents and chemicals: pay attention to slipping. Head protective helmet.

Materials generally suitable for chemical agents are neoprene and vinyl rubber. No protective clothing can provide total protection against various chemicals.

Appropriate individual protective equipment and in compliance with EN 469.

Isolate the area involved by unrelated people.

All methods in order to prevent the outflow of fire-resistant materials and of water in the drains and/or water course are strongly recommended.

Where possible use absorbent fire-resistant material ( see Section 6.3 ).



#### **SECTION 6. Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment expected (see Section 8).

Remove all sources of ignition.

Ensure adequate ventilation and dust control.

Evacuate the danger area and consult a Security Manager.

Avoid breathing vapors and provide adequate ventilation.

## **6.2 Environmental precautions**

Spills from accidental release should be controlled in order not to disperse in the environment.

Prevent leakages in drains, surface waters and groundwater.

Control possible spills in the ground.

Where possible use absorbent fire-resistant material (see Section 6.3).

In case of spills out of control and soil water contamination alert the authorities.

#### 6.3 Methods and materials for containment and cleaning up

Immediately arrange what possible in order to avoid uncontrollable spillages into the environment: plug the sewers and create collection bumps or barriers with not flammable material.

Use not flammable inert absorbent materials such as sand, kieselguhr, anti-slip synthetic fire-retardant and chemical resistant cloths (recommended in polypropylene).

NEVER use sawdust or wood shavings (flammables).

Use only not sparking tools.

Collect manually the material and clean the area with a watery cleanser avoiding the use of thinners. Do NOT use electric vacuum cleaners, avoid compressed air jets that would cause dispersion in the air.

Use a solid container for to hazardous wastes equipped with a lid well closable for the following disposal.

Hazardous wastes must be disposed through authorized firms (see Section 13).

#### **SECTION 7. Handling and storage**

#### 7.1 Precautions for safe handling

Use only working tools that satisfy electrical requirement for the use with flammable products. Make sure that the area where you use the product is equipped with an electrical system adequate to the use of flammable materials.

Avoid flames and sparks, avoid the accumulation of electrostatic charges, do not smoke.

The working area should be adequately ventilated. In order to reduce the formation of aerosol during the use of the product, provide localized aspirations on the working place in order to maintain the parameters of exposure within the professional limits ( see Section 8 ).

Avoid contact with skin and eyes: wear individual protection ( see Section 8 ).

Provide the area for the product use, with everything required for environmental protection. Keep available possible spillages control materials, suitable containers for hazardous wastes and everything needed to prevent the product from flowing into the sewers. (references Section 7).

Do not eat, nor drink nor smoke on the working area.

Remove working clothes and protective equipment before entering dining areas.

Immediately wash your hands carefully after handling the product, rinse the face is also recommended.



## 7.2 Conditions for safe storage, included possible incompatibilities

Personnel charged of storage operations must have access to personal protection equipment in case of some accidental spillages due to packages breaks (see Section 8).

Keep packages always away from possible ignition sources, static electricity, sparks and do not smoke on the premises.

Always store the product in tightly sealed original bottles at maximum temperatures of about 25° C.

Keep the boxes so that the bottles are in vertical position, do not stack to overload the loading beds. The product is packed in cartons containing 6 bottles of 1 litre aluminium with plastic screw sealed cap.

Keep away from foodstuffs.

Avoid contact with oxides and salts of heavy metals.

The areas assigned as product storage have to satisfy the general rules for flammable materials and the specifications expected in such case for electrical systems. The storage must have an appropriate ventilation. In the areas it must be kept into consideration the possible protection on sewers.

The places must have the materials expected for possible accidental spillages and for resultant hazardous waste disposal (reference Section 6).

Access denied to unauthorized persons. Advised specific danger signs on the places.

## 7.3 End Uses specific

Follow end uses (see Section 1.2).

IU3: industrial end use (refer to Annex Exposure Scenarios).

IU6: service life in articles

## **SECTION 8. Exposure control/Personal protection**

#### 8.1 Control parameters

## 8.1.1 Professional exposure limits

Substance: Dichloromethane

CAS N°: 75-09-2

Nation EU CH		alue ( 8 hours ) exposure Limit mg/m3 350 175	Short Terr ppm Not estab 300	value ( 15 min ) m Exposure Limit mg/m3 lished Not established 1050 lished Not established	Notes Legal basis TWA – STEL WELs
Exposure methods	local acute DNEL effetc	,	<b>DNEL</b> mic acute effects	local chronic DNEL effects	systemic chronic DNEL effects
Oral Inhalation Dermal	Not establis 706 mg / m <sup>3</sup> Not establis	706 n	established ng / m³ established	Not established 353 mg / m³ 4750 mg / bw / day	Not established 353 mg / m³ 4750 mg / bw / day



Substance: Ethyl acetate CAS N°: 141-78-6

OEL

Nation OEL Limit value (8 hours) OEL Limit value (15 min) Notes Legal basis

Long Term Exposure Limit Short Term Exposure Limit ppm mg/m3 ppm mg/m3

EU 400 Not established Not established TWA - STEL

**DNEL** 

local acute systemic acute local chronic systemic chronic Exposure **DNEL effects** methods **DNEL effetcs** DNEL effects DNEL effects Oral Not established Not established Not established Not established Inhalation 1468 mg/m<sup>3</sup> 734 mg/m<sup>3</sup> Not established Not established Dermal Not established Not established Not established 63 mg / bw / day

## 8.1.2 Predicted no effect concentrations

Environmental protection targets Values **PNEC**Substance: Dichloromethane

CAS N°: 75-09-2 Soft water 0,54 mg / kg Sea water 0,194 mg / kg 0,972 mg / kg Sediments not estimated Food chain Microorganisms waters treatment 26 mg / liter Soil (agricultural) 0,583 mg / kg not estimated Air

Substance: Ethyl acetate CAS N°: 141-78-6

Soft water 0,26 mg / kg
Sea water not estimated
Sediments 0,34 mg / kg
Food chain not estimated
Microorganisms waters treatment not estimated
Soil (agricultural) 0,26 mg / kg
Air not estimated

#### 8.2 Exposure controls

#### 8.2.1 Appropriate technical controls

Avoid these processing to persons with hypersensitivity and/or respiratory and skin allergies.

Do not eat, drink or smoke during job role.

Avoid contact with skin and eyes.

Ensure an adequate air turnover of the workspace.

If the natural ventilation turns out to be insufficient, use a localized aspiration.

Consider specific working procedures and the consequent exposure limit as, in relation to the control parameters ( see Section 8.1 ), they determine the level of personal protection.



## 8.2.2 Personal protection measures

#### 8.2.2.1 Eyes and face protection



Protective glasses are recommended in order to avoid spurts in the eyes.

#### 8.2.2.2 Skin protection



Wear butylic nitrile or Viton™ gloves (EN 374: minimum thickness 0,7 mm, time penetration 120 min ). Suitability individual tests must be performed as the data are approximate.

Replace the gloves at first signs of usury and/or damage. Regularly change the gloves especially after frequent use.

Wash your hands carefully after handling the product, also recommended to rinse your face.

## 8.2.2.3 Respiratory Protection



Use a respiratory protection if technical conditions ( see Section 8.2.1 ) are not adequate. Use respiratory filter type AX for short processings ( EN 141-405 ).

#### 8.2.2.4 Thermal hazards

None particular.

Follow the precautions of flammability (see Section 7.1) and fire (see Section 5.2).

#### 8.2.3 Environmental exposure controls

Follow the technical controls ( see Section 8.2.1 ). Follow the precautions of flammability ( see Section 7.1 ). Follow the fire measures ( see Section 5.2 ).

#### SECTION 9. Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Data related to solvent substances, if not available for the mixture.

Appearance: fluid viscous
Physical state: liquid
Odour caracteristic
Odour threshold: 25 - 610 ppm
pH: not applicable
Melting point / Freezing point: - 28,6 °C

Initial boiling point: -28,6 °C

Initial boiling point: 40 °C (1,013 hPa)

Boiling range: 40 - 76 °C (1,013 hPa)

Flash point: 35 °C (closed cup)

Evaporation rate: not applicable

Flammability (solid / gas): not applicable

Lower flammability: 7,3 % (V) to 10 °C

Upper flammability: 22,0 % ( V )
Vapour pressure: not available

Vapour density (air = 1): 2,50



Relative density:  $\cong$  1,20 g / ml at 20°C Solubility ( water ):  $\cong$  20 % at 20°C

Solubility ( other ): miscible with the greater part of organic solvents

Partition coefficient octanol / water: not established

Auto-ignition temperature: 418 °C

Decomposition temperature: not applicable

Viscosity: 900 - 1200 mPa\*s at 20°C

Explosive properties: not applicable Oxidizing properties: not applicable

#### 9.2 Other information

None.

#### **SECTION 10. Stability and reactivity**

## **10.1 Reactivity**

Stable in normal conditions of handling and storage (see Section 7).

#### 10.2 Chemical stability

Stable in normal conditions of handling and storage (see Section 7).

## 10.3 Possibility of hazardous reactions

Avoid mixture with strong alkaline substances or amines, mercuric oxide, heavy metal oxides such as those of mercury, silver ol lead, nitric acid, acids, ammonia, anilines, halogenated componds, acetone ( see Sections 7 and 9.2 ).

#### **10.4 Conditions to avoid**

Follow the listed instructions (see Sections 7, 8.2.1 and 9.2).

#### 10.5 Incompatible materials

Oxides and salts of heavy metals.

Metal powders.

Amino substances.

Alkaline products.

Nitric acid.

Strong acids products.

Copper, lead end alloys.

#### 10.6 Hazardous decomposition products

It does not decompose if employed for the intended uses ( see Section 1.2 ) and in the described normal conditions of handling and storage ( see Section 7 ).

## SECTION 11. Information on toxicological effects

#### 11.1 Information on toxicological effects

#### 11.1.1 Acute toxicity

Substance: Dichloromethane

CAS N°: 75-09-2

Method: RTECS
Species: human
Exposure method: oral

Dose effect: LDLo = 357 mg / kg Exposure duration: not available

Results: Absorption, nausea, vomit, aspiration risk during vomiting.

Aspiration may cause pulmonary oedema and pneumonia.



Method: IUCLID species: rat

Exposure method: inhalation

Dose effect: not available

Exposure duration: LC50 = 88 mg / kg

Results: May cause respiratory irritation

Method: OECD TG 402

Species: rat

Exposure method: cutaneous

Dose effect: LD50 > 2000 mg / kg

Exposure duration: not available

Results: Skyn irritating , may cause dermatitis

Substance: Ethyl acetate CAS N°: 141-78-6

Method: OECD 401 Species: rabbit Exposure method: oral

Dose effect: LD50 = 4934 mg/kg Exposure duration: not available

Results: If swallowed may cause indisposition

Narcotic effect

Method: not available

Species:

Exposure method: inhalation
Dose effect: not available

Exposure duration:

Results: May cause respiratory irritation

Narcotic effect

Method: OECD 404
Species: rabbit
Exposure method: cutaneous

Dose effect: LD50 > 20000 mg/kg

Exposure duration: not available

Results: Repeated exposure may cause skin dryness or cracking

#### 11.1.2 Corrosion/cutaneous irritation

Substance: Dichloromethane

CAS N°: 75-09-2

Method: IUCLID Species: rabbit

Results: Repeated exposure can cause dryness or skin chaps.

Substance: Ethyl acetate CAS N°: 141-78-6

Method: not evaluated

Species: Results:

## 11.1.3 Serious ocular lesions/serious ocular Irritations

Substance: Dichloromethane

CAS N°: 75-09-2



Method: not available

Species: rabbit

Results: May cause dimming of cornea.

Substance: Ethyl acetate CAS N°: 141-78-6

Method: not available

Species:

Results: Slightly irritating

## 11.1.4 Respiratory sensitization

Substance: Dichloromethane

CAS N°: 75-09-2

Method: not available Species: not available

Results:

Substance: Ethyl acetate CAS N°: 141-78-6

Method: not available

Species:

Results: Not available

#### 11.1.5 Cutaneous sensitization

Substance: Dichloromethane

CAS N°: 75-09-2

Method: IUCLID - Patch Test
Species: not available
Results: Negative

Substance: Ethyl acetate CAS N°: 141-78-6

Method: not available

Species:

Results: not available

## 11.1.6 Germ cells mutagenicity

Substance: Dichloromethane

CAS N°: 75-09-2

Method: not available
Species: mammiferous cells
Results: Chromosomic aberration

Substance: Ethyl acetate CAS N°: 141-78-6

Method: not available

Species:

Results: Not available

## 11.1.7 Carcinogenicity

Substance: Dichloromethane

CAS N°: 75-09-2

Method: AMES – OECD TG 471 Species: salmonella typhimurium

Results: Positives

Substance: Ethyl acetate CAS N°: 141-78-6

Method: not available

Species:

Results: Not available

## 11.1.8 Toxicity for reproduction

Substance: Dichloromethane

CAS N°: 75-09-2

Method: not available

Species:

Results: Not available

Substance: Ethyl acetate CAS N°: 141-78-6

Method: not available

Species:

Results: Not available

## 11.1.9 Summary of the CMR properties evaluation

Suspected of causing cancer.

## 11.1.10 Specific target organs toxicity (STOT) - single exposure

Substance: Dichloromethane

CAS N°: 75-09-2

Way of exposure: oral

Results: Not available

Ways of exposure: inhalation Results: Not available

Way of exposure: cutaneous Results: Not available

Substance: Ethyl acetate CAS N°: 141-78-6

Way of exposure: oral

Results: Not available

Ways of exposure: inhalation Results: Not available

Way of exposure: cutaneous Results: Not available



## 11.1.11 Specific target organs toxicity (STOT) - repeated exposure

Substance: Dichloromethane

CAS N°: 75-09-2

Method: not available

Species:

Exposure method: oral

Dose effect:

Exposure duration:

Results: Not available

Method: not available

Species:

Exposure method: inhalation

Dose effect:

Exposure duration:

Results: Not available

Method: not available

Species:

Exposure method: cutaneous

Dose effect:

Exposure duration:

Results: Not available

Substance: Ethyl acetate CAS N°: 141-78-6

Method: not available

Species:

Exposure method: oral

Dose effect:

Exposure duration:

Results: Not available

Method: not available

Species:

Exposure method: inhalation

Dose effect:

Exposure duration:

Results: Not available

Method: not available

Species:

Exposure method: cutaneous

Dose effect:

Exposure duration:

Results: Not available

#### 11.1.12 Danger in case of aspiration

Aspiration may cause pulmonary oedema and pneumonia, cough and respiratory difficult, lachrymation and dimming of cornea.

After inhalation of significant quantities may cause central nervous system diseases (CNS), unconscious state, narcosis, drowsiness, dizziness, cardiac arithmia, lowering in blood-pressure.

#### 11.1.13 Interactive effects

Data not available.

The different substances of a mixture can interact between them in the organism giving origin to various rates of absorption, metabolism and excretion. Consequently the toxic action can be altered and the total toxicity of the mixture can be different from that of the contained substances.



## 11.1.14 Absence of specific data

Specific information on such mixture are not available.

The information are based on the toxicological behavior of the main components (see Section 3).

## **SECTION 12. Ecological information**

## **12.1 Toxicity**

## 12.1.1 Toxicity (short term) acute

Substance: Dichloromethane

CAS N°: 75-09-2

Fishes: LC50 = 193 mg/l 96 hours Pimephales promelas Shellfishes: EC50 > 27 mg/l 48 hours Daphnia magna

Aquatic algae-plants: EC50 > 550 mg/l 192 hours Scenedesmus subspicatus
Other organisms: EC50 = 288 mg/l 15 minutes Photobacterium phosphoreum

Results: Not dangerous

Substance: Ethyl acetate CAS N°: 141-78-6

Fishes: LC50 = 230 mg/l 96 hours Pimephales promelas Shellfishes: EC50 > 100 mg/l 72 hours Daphnia magna

Aquatic algae-plants: Not available Other organisms: Not available Results: Not available

## 12.1.2 Toxicity (long term) chronic

Substance: Dichloromethane

CAS N°: 75-09-2

Fishes: Not available
Shellfishes: Not available
Aquatic algae-plants: Not available
Other organisms: Not available
Results: Not available

Substance: Ethyl acetate CAS N°: 141-78-6

Fishes: Not available
Shellfishes: Not available
Aquatic algae-plants: Not available
Other organisms: Not available
Results: Not available

#### 12.2 Persistence and degradability

Substance: Dichloromethane

CAS N°: 75-09-2

Biotic degradation: Not available Abiotic degradation: Not available

Physical and photochemical

elimination: Not available

Biodegradability: 66 % 2 days OECD 301 C

Results: Slowly biodegradable



Substance: Ethyl acetate CAS N°: 141-78-6

Biotic degradation: Not available Abiotic degradation: Not available

Physical and photochemical

elimination: Not available Biodegradability: Not available

Results: Easily biodegradable

### 12.3 Bioaccumulative potential

Substance: Dichloromethane

CAS N°: 75-09-2

BCF factor: < 0,91 - 40

Results: Bioaccumulation not expected

Substance: Ethyl acetate CAS N°: 141-78-6

BCF factor: Not available Results: Not available

## 12.4 Mobility in soil

Substance: Dichloromethane

CAS N°: 75-09-2

Surface tension: Not available Absorption/Desorption: Log Koc = 1,00 Results: Mobile in soils

Partially soluble in water may diffuse in aquatic environments

Substance: Ethyl acetate CAS N°: 141-78-6

Surface tension: Not available
Absorption/Desorption: Not available
Results: Soluble in water

#### 12.5 Results of PBT evaluation

The product does not contain SVHC substances (substances of very high concern ) or estimated as PBT (persistent, bioaccumulative and toxic substances ) or estimated as vPvB ( very persistent and very bioaccumulative substances ).

#### **12.6 Other adverse effects**

Other adverse effects for the substances of the mixture have not been identified.

#### 12.7 Additional information

The product satisfies the directive UE 2011-65, entitled RoHS 2, concerning the restriction of certain dangerous substances in the electronic and electrical equipment ( AEE ).

With reference to art. 6 "review and modify of the list of substances with use restrictions" listed in annex II, the following dangerous substances are:

 Substance
 MCVs %

 Lead
 < 0,1</td>

 Mercury
 < 0,1</td>

 Cadmium
 < 0,01</td>

 Chromium VI
 < 0,1</td>



Biphenyl Polybromurates ( PBB ) < 0,1 Ethers of diphenyl polibromurates (PBDE) < 0,1

It follows that the product complies with EU Directive 2011-65 (RoHS 2).

## **SECTION 13. Disposal considerations**

#### 13.1. Waste treatment methods

## 13.1.1 Product/packaging disposal

Waste processing residues are hazardous waste.

Dispose as hazardous waste through authorized companies in facilities suitable for their treatment.

Observe the special waste regulations in agreement with the competent authorities.

Not purified packaging, not completely cleaned from the contained product, must be disposed like the product itself, that is in quality of dangerous wastes.

Only not contaminated packaging, but only fully cleaned can be recycled.

The cardboard packaging can be disposed normally, making sure they are not dirty by any accidental spillage of product.

The type of packaging is described in Section 7.2.

Avoid to pour into unsuitable and possibly contaminated containers with substances that can trigger chemical reactions ( see Sections 9.2 and 10.5 ).

Waste containers may be done of aluminium, steel or polyethylene, and shall meet the requirements of product transport ( see Section 14 ) or hazardous waste ( see Section 13.1.2 ).

## 13.1.2 Waste treatment/relevant information

Waste adhesives must be disposed by companies authorized to transport hazardous waste with the encoding of the European List of Wastes:

LoW code: 08 04 11\*

Waste description: adhesive and waste sealing containing organic solvents or other dangerous substances

## 13.1.3 Disposal through sewage

Waste should not be disposed through sewage release.

#### 13.1.4 Other recommendations for disposal

Follow the safe handling and storage product regulations also for waste (see Section 7).

## **SECTION 14. Transport information**

#### 14.1 ONU number

UN number: 1133

#### 14.2 ONU shipping name

Name: ADHESIVES

#### 14.3 Hazard classes for transportation

ADR - RID Land transport

Class: 3 Classification code: F 1 Packaging group: II



Transport Category: 2 (Quantity for Transport Unit: 333 kg) Ref. ADR 1.1.3.6

Tunnel restriction tails: D/E

IMDG IMO Marine transport

Class: 3.2 Marine Pollutant: No Packing Groups: II

Proper shipping name: Flammable Liquids N.O.S. (Ethyl acetate ) UN 1133

Segregation: Not available

ICAO - TI Air transport

Class: 3 Packaging group: II

Name: ADHESIVES containing flammable liquid

#### 14.4 Special precautions for users

Follow the handling and storage instructions ( see section 7 ).

## **14.5 Transport in a jumble in compliance with Attachment II of MARPOL 73/78 and code IBC** No pertinent information.

## **SECTION 15. Regulatory information**

## 15.1 Rules and legislation on safety, health and the environment, specific for the mixture

#### **EU Regulations**

Regulations 1907-2006 EC (REACH) and Modifications 453-2010 EC, 253-2011 EC

Regulation 1272-2008 EC (CLP)

Regulation 143-2011 EC (SVHC)

Directive 67-548 EEC "Dangerous substances "

Directive 1999-45 EC "Dangerous preparations"

Directive 98-24 EC "Chemical agents"

Directives 2000-39 EC, 2006-15 EC, 2009-161 EU "Limits of professional exposure "

Directive 89-686 EEC "Individual protection systems"

Directives 2006-12 EC, 2008-98 EC "Waste"

#### Other EU Regulations

Directive 2004-37 EC "Workers protection from carcinogenic risks "

Directive the 92-85 EEC "Female workers safety improvement"

Directive 94-33 EC "Protection on young people job"

Directives 96-35 EC, 2000-18 EC "Transport methods classification "

Regulations 2004-648 EC "Detergent regulations "

Directive 2011-65 EU (RoHS 2) "Restriction substances in equipment electrical workers"

## 15.2 Chemical safety evaluation

An estimation of chemical safety has been carried out for this mixture.



#### **SECTION 16. Other information**

#### 16.1 Modifications indications

Review CLP N° 1.1 Date 12-29-14 Modified Sections: none.

Modifications Description: not pertinent.

## **16.2 Abbreviations and acronyms**

ADR Accord Dangereuses Route

ACGIH American Conference of Governmental Industrial Hygienists

BCF Bioconcentration factor
CAS Chemical Abstarcts Service

CLP Classification Labelling and Packaging regulation

DNEL Derived No Effect Level

ECx Effective Concentration with X% response

ES Exposure Scenarios
EWC European Waste Catalogue

GHS Globally Harmonized System of classification and labelling of chemicals

ICAO-TI International Civil Aviation Organization Technical Instructions

IMDGInternational Maritime Dangerous GoodsIMOInternational Maritime OrganizationIOELVIndicative Occupational Exposure LimitLCxLethal Concentration with X% response

LDLo Lethal Dose Low

LDX Lethal Dose with X% response LOW List of Wastes regulation codes

MCVs Maximum Concentration Values in homogeneus material

N.O.S. Not Otherwise Specified

NOAEC No Observable Adverse Effect Concentration

NOAEL No Observed Adverse Effect Level

NOEL No Observable Effect Level

OECD Organisation for Economic Co-operation and Development

OEL Occupational Exposure Limit

PBT Persistent Bioaccumulative and Toxic
PEC Predicted Effect Concentration
PNEC Predicted No Effect Concentration

REACH Registration, Evaluation and Authorization of Chemicals RID Règlement International Dangereuses trasport ferroviaire

STEL Short Term Exposure Limit
STOT Specific Target Organ Toxicity
SVHC Substance of very high concern

TWA Time Weighted Average

vPvB very Persistent and very Bioaccumulative

WELS Workplace Exposure Limits (UK)

#### 16.3 Classification and procedure used

The classification of the product has been executed in compliance with art. 9 of Regulation EC 1272-2008 (CLP).

## **16.4 Training advice**

We recommend a training of personnel involved in the use of dangerous products in specific work environments and related use conditions for security purpose.

The employers allow workers and their representatives to have access to the information supplied in relation to the products used or to which they can be exposed during their professional activity.



#### 16.5 Further information

The present information are based on the actual state of our knowledge.

The present sheet has been draft and it's valid only for this product.

The product users have the duty to make sure about the suitability for any specific use.

The product must be used in accordance with the description ( see Section 1.2 ).

The product doesn't have to be used in any way expecting the insertion in the human body, in contact with fluid or tissue inside the body.

Our company assumes no responsibility for improper uses than those described, or for mixing with different products that we do not known and unauthorized by us.

Working conditions existing by the user are out of our knowledge and control, therefore they are under his complete responsibility.

Users are fully responsible for the laws in force regarding the safety with the use of hazardous products in the workplace.

The user has the burden of inspection and checking the suitability and conformity of the incoming goods.

These information do not involve any responsibility and/or warranties, expressed or implied, about the quality and features of the product.

These information do not involve taking any obligation or responsibility by our part, also in presence of intellectual property rights of third parties and, in particular, of patent rights.

Our company reserves the right to make any changes to the products arising from technological progress or further development activities.

## ANNEX EXPOSURE SCENARIO GES 10

#### 1. Short title

Generic Exposure Scenario 10 ( GES 10 )
Indoor use with limited opportunity for exposure

#### 2. Description of activities / processes covered in the Exposure Scenario

## 2.1 Product categories

PC 1: Adhesives and sealants

#### 2.2 End Uses

IU 3: Industrial end useIU 6: Service life in articles

#### 2.3 Process categories

PROC 21: Low energy manipulation of substances bound in form of materials or articles

## 2.4 Environmental release categories

ERC 6c: Industrial use of monomers for polymerisation

ERC 6d: Industrial use of auxiliares for polymerisation processes in production of resins, rubbers, polymers

ERC 7: Industrial use of substances in closed systems



#### 2.5 Use Sectors

SU 3: Industrial Manufacturing (all) Offshore industries SU 2b: Manufacture of wood and wood products SU 6a: Manufacture of plastic products including compounding and conversion SU 12: SU 15: Manufacture of fabricated metal products except machinery and equipment SU 16: Manufacture of computer, electronic and optical products, electrical equipment SU 17: General manufacturing Furnitures manufacturing SU 18: Building and construction work SU 19: Health services SU 20: SU 22: Public domain Research and scientific development SU 24:

## 2.6 Article Categories

Passenger cars and motor cycles AC 1-1: AC 1-2: Railway, aircraft, vessels, boats, trucks and associated transport equipment AC 2: Machinery, mechanical appliances, electrical / electronic articles Electrical and electronic products AC 3-1: Electrical household appliances AC 3-3: AC 4: Glass and ceramic articles AC 7: Metal articles AC 10-5: Other general rubber product AC 11: Wood articles AC 13\*: Plastic, small articles

## 3. Operational Conditions

## 3.1 Duration and frequency of use

Duration: Dependent upon professional levels (see Section 8).

Dependent upon activity (see Section 4 Exposure Scenario).

Frequency of

exposure: daily

Emission

days: 300 days / year

#### 4. Other Operational Conditions

#### 4.1 Physical form of product

Liquid

## 4.2 Concentration of substances in product

Concentration: <= 80 %

#### 4.3 Maximum used amount per day

< 1000 kg / day



## 4.3.1 Risk Management (RMM)

Concentration: 0 – 5 %
Duration: 0 – 8 hours
Process: Industrial PROC 21
RMM: No identified

ECETOC Model: Not available for volatiles substances

#### 4.3.2 Operational conditions related to environment

Mixture indoor used and related handling.

#### 4.3.4 Annual amount used per site

Quantity: <= 260 kte / year

## 5. Other operational conditions determining exposure

Room size: > 20 m3 ( estimated )

Ventilation rate: General ventilation of workplace

5 – 15 air changes per hour recommended for general application

Emissions: Emission by controlled ventilation in order to guarantee the accordance with the

legislation of environmental protection Avoid the discharge in the drains

## 6. Risk Management Measures (RMM)

#### 6.1 Human health measures

Oral Protection: Do not eat, nor drink nor smoke on the working area.

Dermal Protection: Wear butylic nitrile or Viton gloves

(EN 374: minimum thickness 0,7 mm, time penetration 60 min) Replace the gloves at first signs of usury and/or damage Regularly change the gloves especially after frequent use Wash your hands carefully after handling the product

Inhalation Protection: Not available (indoor use with limited oppotunity for exposure)

Eyes Protection: Protective glasses are recommended

#### 6.2 Environment related measures

Air: Environmental control in order to guarantee that the emission does not exceed the

limits of professional exposure (see Section 8)

Water: Use appropriate containment to avoid environmental contamination (see Sections 6 and 7)

Soil: Control accidental spills ( see Sections 6 and 7 )

#### 7. Waste related measures

Waste processing residues are hazardous waste.

Dispose as required (see Section 13).



## 8. Prediction of exposure resulting from the conditions described above

## 8.1 Human exposure estimation

Value RCR

Dermal

concentration: 2350 mg / kg bw / day <= 0,50

**Inhalative** 

concentration: 35 ppm <= 0,40

Combined: <= 0,90

Evaluation method: Risk characterisation ratio (RCR) based on DNEL

Exposure calculated by ECETOC - TRA

## 8.2 Environmental exposure estimation

Concentration Value RCR

in air: Not available mg/m3 Not available

in water: Not available mg/m3 Not available

in sediment: Not available mg/kg ww Not available

in soil: Not available mg/kg ww Not available

Evaluation method: Risk characterisation ratio (RCR) based on PNEC and PEC

Calculated by EUSES (local compartments)

#### 9. Other information

Risk adequately controlled.

During liquid manipulation protective gloves are required.

The values measured may be used to confirm the exposure levels in the extremes of the Exposure Scenario.

PC 1 (adhesives and sealants): evaluated for higher residual monomer according to ECETOC standard defaults.

For changing specific defaults of the model equation [0,5 >= RCR (dermal / inhalation)\* (amount used / default ECETOC)\* (duration / dafault ECETOC)\* product ingredient / default ECETOC)] has to be satisfied.

Use the exposure assesment tools ECETOC-TRA and EUSES for confirmation that you work inside to boundaries set by the GES ( RCR < 1 and PEC / PNEC < 1 ).