

Specialist Paints for the Alloy Wheel Industry

MATERIAL SAFETY DATA SHEETS

1. Identification of the substance and of the company/undertaking

Product Details:

Product Name: Envirocoat Super Black 58-0000-29

Application of the substance/ the preparation: Gloss Smooth

Supplier: WHEELPAINTS

NN5 5JF

UNITED KINGDOM

Tel: 01604 600582

E-mail: esales@wheelpaints.co.uk

www.wheelpaints.co.uk

2. Identified Uses

Coating powder

Based on use descriptor system given by guideline of the European Chemical

Revision Date: 22 October 2018

Agency

Sector of use SU 3

Product category PC9a, PC9b

Further information see chapter Exposure scenario

The product is only for industrial and/or professional use, not for any private

consumer use.

3. Hazards Identification

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

Classification of the substance or mixture

Classification of the mixture

According to Regulation (EC) No 1272/2008

EUH210;

Label elements

Labelling according to Regulation (EC) No 1272/2008.

Hazard statements

EUH210 Safety data sheet available on request.

Other hazards

May form explosible dust-air mixture if dispersed.

Restricted to professional users.

Composition/information on ingredients

Mixtures

Chemical characterization

Mixture of synthetic resins and pigments

Hazardous components

Substances presenting a health or environmental hazard within the meaning of Regulation (EC) No 1272/2008

CAS 1860-26-0 2-ethyl-N,N-bis(2-ethylhexyl)hexan-1-amine

EC 217-461-0 REACh 01-2119896439-16 0.1 -<0.2 %

Classification Repr. 2, H361f; STOT RE 2, H373;

Other reporting relevant substances

CAS not available Coating powder inhalable

EC REACh no registration number available 95.00 - < 100.00%

Classification

CAS not available Coating powder respirable

EC REACh no registration number available 7.00 - < 10.00 %

Classification

Up to the given revision date of this safety data sheet only the above-mentioned REACh registration numbers are assigned to the chemical substances used in this mixture.

4. First Aid Measures

Description of first aid measures

General advice

When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation

Avoid breathing dust. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.

Skin contact

Do NOT use solvents or thinners. Take off contaminated clothing and shoes immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Ingestion

If swallowed, seek medical advice immediately and show this safety data sheet (SDS) or product label.

Most important symptoms and effects, both acute and delayed

Please see practical experience in section 11.

Indication of any immediate medical attention and special treatment needed

If unconscious place in recovery position and seek medical advice.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

Water sprayDry chemical

Extinguishing media which shall not be used for safety reasons

High volume water jet

Special hazards arising from the substance or mixture

Hazardous combustion products

Fire will produce dense black smoke containing hazardous combustion products. Exposure to decomposition products may be a hazard to health.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Advice for firefighters

Fire and Explosion Hazards

The product is not flammable. The product itself does not burn.

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: Full protective flameproof clothing. Wear self-contained breathing apparatus for firefighting if necessary.

Do not allow run-off from firefighting to enter drains or water courses.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Air out the room. Do not breathe dust.

Environmental precautions

Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems. Please avoid any emission of volatile organic compounds as possible.

Methods and materials for containment and cleaning up

Contain and collect spillage with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations. Do not use a dry brush as dust clouds or static can be created! Use a suitable vacuum cleaner.

Reference to other sections

Comply with safety directives (see chapters 7 and 8).

7. Handling and Storage

It is recommended that advice is taken from a competent occupational health practitioner on the assessment of employees with skin or respiratory complaints before the individual is exposed to the uncured product.

Precautions for safe handling

Safe handling advice

Precautions should be taken to prevent the formation of dusts in concentrations above flammable, explosive or occupational exposure limits. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing. Keep away from open flames, hot surfaces and sources of ignition.

Smoking, eating and drinking should be prohibited in the application area.

Electrical equipment and lighting should be protected to appropriate standards to prevent dust meeting hot surfaces, sparks or other ignition sources. For personal protection see section 8. Comply with the health and safety at work laws. If material is a coating, do not sand, flame cut, braze or weld dry coating without an appropriate respirator or appropriate ventilation, and gloves.

Advice on protection against fire and explosion

Always keep in containers of same material as the original one. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Observe label precautions. Refer to Technical Data Sheet (TDS) for further information about storage temperature. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

Specific end use(s)

Please see exposure scenarios as given in the annex.

	8. Exposure controls and personal protection							
		DNEL						
		CAS-No.	Chemical name	End Use	Exposure	Fre-	Туре	Value
					routes	quency of		
						exposure		
		1860-26- 0	2-ethyl-N,N-bis(2- ethylhexyl)hexan-	Workers	Dermal	Long term	Systemic effects	0.13 mg/kg/day
			1-amine				Systemic	
				Workers	Inhalative	Long term	•	0.02 ppm
		PNEC						
		No informa	tion available.					
Community / national occupational exposure limits								

CAS-No.	Chemical name	Source Time	Type	Value Note
	Coating powder inhalable			10 mg/m3
	Coating powder respirable			4 mg/m3
Glossary				
Indi IOELV Val	icative Occupational Exposure Limit ues			
TWA Tim	ne weighted average			

Exposure controls

Additional technical information on the plant

Do not breathe dust. Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- using a local exhaust ventilation. If these are not enough to maintain exposure to dusts below the OEL, suitable respiratory protection must be worn.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

If dust formation exceeds the air concentration limits, then a respiratory protection device approved for this purpose must be worn.

Hand protection

The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The breakthrough time of gloves is unknown for the product itself. The glove material given is recommended on basis of the substances in the preparation.

Chemical name	Glove material	Glove thickness time	Break through
	Nitrile rubber	0.33 mm	> 240 min

The protective glove should be checked in each case for their work specific suitability (e.g. mechanical stability, product compatibility, and anti-static properties). After contamination, the glove must be changed. Care should be taken when working with sharp edged articles as these can easily damage the gloves and make them ineffective. The instructions and information provided by the glove supplier on use, storage, maintenance and replacement must be followed. Damaged gloves or those showing signs of wear should be replaced immediately. Preventive skin protection such as skin protective cream is recommended. Work tasks should be arranged in such a way that gloves do not have to be worn continuously.

Eye protection

Eye protection (to EN 166/170) designed to protect against exposure to dusts should be worn when there is a likelihood of exposure.

Skin and body protection

Wear suitable protective clothing. Care should be taken in the selection of protective clothing. Avoid contact with the powder on throat and wrists due to possible inflammation and irritation of the skin.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

Environmental exposure controls

Do not let product enter drains.

For ecological information refer to section 12.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance

Form: solid Colour: black Odour: Odour is not perceptible.

Important health, safety and environmental information

Property	Value	Method
рН	Not applicable	
Melting point/freezing point	95 – 1351 C	
Boiling point/boiling range		
Flash point	Not applicable.	EN ISO 3679
Evaporation rate	Not applicable	
Flammability (solid, gas)	No data available	
Lower explosion limit	20 g=m ³	
Upper explosion limit	Not applicable.	
Vapour pressure	Not applicable.	
Vapour density	No data available	

20 C - DIN 1.34 g=cm³ Density 53217/ISO 2811

Solubility(ies)

Water solubility moderate

Solubility in other

No data available solvents

This product is a mixture.

Partition coefficient: For ingredient details see

n-octanol/water section 12

Minimum ignition

15 - 60 mJ CEN TC 305 energy

This product is a mixture.

Decomposition For further information temperature

section 10.

Viscosity (23 C) solid

Explosive properties Not explosive

Oxidizing properties not oxidizing

Other information

Basis Vapour Content of pressure volatile >= 0.01 kPa components % (including water)

10. Stability and Reactivity

Reactivity

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Chemical stability

The product is chemically stable.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Stable under recommended storage and handling conditions (see section 7).

Incompatible materials to avoid

not required under normal use

Hazardous decomposition products

None known

11. Toxicological Information

Information on toxicological effects

General observations

There is no data available on the product. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1272/2008/EC and classified for toxicological hazards accordingly. See sections 2 and 3 for details.

Practical experience

Swallowing may cause nausea, diarrhoea, vomiting and gastro-intestinal irritation.

Acute toxicity

Acute inhalation toxicity

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

Acute dermal toxicity

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

Acute oral toxicity

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

Irritation

Eyes

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

Skin

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

Corrosion

Eyes

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

Skin

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

Sensitisation

Respiratory sensitisation

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

Skin sensitisation

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

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

Carcinogenicity

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

Mutagenicity

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

Reproductive toxicity

EINECS- No.	Chemical name	Species	Method	Result
217-461-0	2-ethyl-N,N-bis(2-ethylhexyl)hexan- 1-amine			Suspected of damaging
				fertility or the unborn
				child.

12. Ecological Information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses. The data in this section is consistent with data from chemical safety reports available at the date of revision.

Toxicity

No information available.

Persistence and degradability

No information available.

Bio accumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Based on available data no ingredient is classified for this hazard property (please see section 3).

Other adverse effects

The preparation was evaluated in accordance with the conventional method of the preparation directive 1272/2008/EG and was not classified as environmental dangerous.

Adsorbed organic bound halogens (AOX)

Product does not contain organic linked halogens contributing to AOX.

13. Disposal considerations

Waste treatment methods

Dispose of in accordance with local regulations.

Product

Recommendation:

A disposal process that converts the waste into energy is recommended. Can be landfilled or incinerated, when in compliance with local regulations.

Waste Key	
Number	Description
080201	Waste coating powders

Uncleaned packaging

Recommendation:

Empty containers can be landfilled, when in accordance with the local regulations. Properly emptied composite packaging is to dispose of as commercial waste (waste keynumber 150105).

14. Transport Information

Not classified as dangerous in the meaning of transport regulations.

ADR/RID:in accordance with nota 1 of chapter 2.2.3.1.1

IMDG:in accordance with chapter 2.3.1.3
ICAO/IATA:in accordance with chapter 3.3.1.3
UN number
Not applicable.
UN proper shipping name
Not applicable.
Transport hazard class(es)
Not applicable.
Backs ging group
Packaging group
Not applicable.
Environmental hazards
ADR/RID; IMDG; ICAO/IATA: none
Marine pollutant
IMDG: no
Transport in bulk according to Annex II of Marpol and the IBC Code
Deliveries shall only be made based on appropriate packaging and in compliance with
traffic laws.
15. Regulatory Information
Safety, health and environmental regulations/legislation specific for the substance
or mixture
The product is non-dangerous in accordance with Directive 1999/45/EC.
National legislation
This safety datasheet has been prepared according to British legislation.
The product is labelled according to the Chemicals (Hazard Information and Packaging for
Supply) Regulations 2002 as amended (CHIP Regulations). The risk associated with the use of this product must be assessed in accordance with the Control of Substances Hazardous
to Health (COSHH) Regulations and the Dangerous Substances and Explosive

Atmospheres Regulations.

Restricted to professional users.

Chemical safety assessment

No safety checks were carried out on the mixture.

16. Other Information

Full text of H phrases with no. appearing in section 3

H361f Suspected of damaging fertility.

May cause damage to organs through prolonged or

H373 repeated exposure.

Information taken from reference works and the literature.

Substance No.

Substances presenting a health or environ-mental hazard within the meaning of Directive 67/548/EEC.

Other directives, limitations and prohibitor regulations.

CAS no: http://support.cas.org/content/chemical-substances http://echa.europa.eu/

http://echa.europa.eu/search-for-chemicals

http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB https://www.cdc.gov/niosh/ipcs/

Regulation (EC) No. 1907/2006 Directive 98/24/EC

Directive 2004/37/EC

REGULATION (EC) No 1272/2008

EUR-LEX: http://eur-lex.europa.eu/homepage.html

Exposure limit for the pure

substance http://osha.europa.eu/OSHA

Training advice

Regulation (EC) No. 1907/2006

Directive 98/24/EC

Further information

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions, however, are

beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.

Annex - Exposure scenarios

Consolidated exposure assessment for industrial use of coating material

The consolidated exposure assessment provides specific information on how a hazardous substance (in a mixture) is to be managed and controlled. It considers specific conditions of use, in order to ensure that a use is safe to humans and the environment. Compliance with operational conditions and risk management measures is required if the exposure assessment is annexed to a mandatory safety data sheet. In this case, identified risk management measures are to be implemented unless the downstream user can ensure safe use in a diverging way.

Consolidated exposure assessment (type 1) for application of powder coatings by spraying

Free short title:

Industrial application of powder coating by electrostatic spraying and/or spraying onto hot substrate

Systematic title based on use descriptors:

Sector of use SU 3

Product category PC9a, PC9b

PROC4 (covering PROC2), PROC8a

Process category (covering

PROC8b), PROC7

Environmental release

category ERC5

Activities covered:

Transferring/loading, spray application, curing of coating material

Contributing scenarios:

PROC4 (covering
PROC2)

PROC8a (covering
PROC8b)

Transfer of substance or preparation
(charging/discharging)

Industrial spraying; Also applicable for: Hot
flocking, in-mould coating

Operational conditions and risk management measures Contributing environmental scenario

Transferring/loading, spray application, curing of coating material

Process conditions:

No transfer to process waste water stream; specific assessment of environmental exposure obsolete

Contributing worker scenarios

Transferring/loading, spray application, curing of coating material

			LEV/T	RVRPE	DPE
Transferring	8a (covering 8b)	> 4	hTRV	no	yes level 2
Industrial spraying7		> 4	hLEV	yes in bo	oothyes
Industrial flocking	7	> 4	hTRV	no	yes level 2
Curing	(covering 42)	> 4	hTRV	no	yes level 2

Further specification:

Above parameters represent standard (default) assumptions according to CEPE mapping of operational conditions Valid information on risk management measures for specific formulation is provided in part 3. Deviation options are explained in part 4 (scaling).

Exposure estimation and reference to its source

Exposure assessment bases on initial scenarios for the used chemicals in this preparation as provided by manufacturers and importers. Identification of a lead substance indicator

per route is based on the DPD+ methodology, considering content, dustiness and hazard characteristics. Use of the mixture is considered safe when conditions for safe use of the lead substance indicator are respected. Risk assessment is not applicable if no initial exposure scenarios are available.

Environmental assessment

No relevant ecotoxicological impact expected; specific description and assessment of environmental exposure obsolete;

Worker assessment

No relevant toxicological impact expected; specific description and assessment of worker exposure obsolete;

Further specification:

Respiratory protection equipment for PROC 7 only applicable for manual application inside a spray-booth Assessment of PROC 4 resp. 2 only relevant in case of substance release in curing process

Guidance to downstream user to evaluate whether he works inside the boundaries set by the exposure scenario

Part 4 is common and is available at the end of the Annex.

Consolidated exposure assessment (type 3) for sanding

Free short title:

Industrial sanding of cured coating

Systematic title based on use descriptors:

Sector of use	SU 3
Product category	PC9a, PC9b
Process category	PROC24
Environmental release category	ERC12a

Activities covered:

Sanding of cured coating

Contributing scenarios:

spERC x4	Wet sanding/wet dust collection in serial production
	Applicable for: Sanding, grinding, chipping or
PROC24	polishing of cured coating film

Operational conditions and risk management measures

Contributing environmental scenario

Sanding of cured coating

Process conditions:

Potential transfer to process waste water stream when applying wet sanding techniques or wet dust collection

		Transfer to process Release Munici	
		waste water	after on-siteSTP
			WWTP
spERC x4 (solids)	Solids in dry film	2%	10%

Contributing worker scenarios

Sanding of cured coating

PROCDOA LEV/TRVRPEDPE

no yes level
Sanding24> 4 hLEV 2

Further specification:

Above parameters represent standard (default) assumptions according to CEPE mapping of operational conditions Valid information on risk management measures for specific formulation is provided in part 3. Deviation options are explained in part 4 (scaling).

Exposure estimation and reference to its source

Exposure assessment bases on initial scenarios for the used chemicals in this preparation as provided by manufacturers and importers. Identification of a lead substance indicator per route is based on the DPD+ methodology, considering content, dustiness and hazard characteristics. Use of the mixture is considered safe when conditions for safe use of the lead substance indicator are respected. Risk assessment is not applicable if no initial exposure scenarios are available.

Environmental assessment

No relevant ecotoxicological impact expected; specific description and assessment of environmental exposure obsolete;

Worker assessment

No relevant toxicological impact expected; specific description and assessment of worker exposure obsolete;

Guidance to downstream user to evaluate whether he works inside the boundaries set by the exposure scenario

By variation of operational conditions and risk management measures (scaling), a downstream user can check whether he works inside the exposure scenario boundaries.

Standard scaling can be based on exposure modifying factors as used by ECETOC TRA which are listed below.

RCR(s) = RCR(o) * EMF(s)/EMF(o)

RCR(s) shall be < 1

RCR(s) = scaled risk characterisation ratio; RCR(o) = original risk characterisation ratio (in part 3)

EMF(s) = exposure modifying factor selected for scaling; EMF(o) = original exposure modifying factor (in part 3)

Scaling may be used consecutively for multiple determinants.

Example: No technical room ventilation for transferring of powder coatings (EMF(o) = 0.3), duration of activity restricted to 1 h/d (EMF(s) = 0.2)

Specific scaling may be based on measured values at the individual site.

Conten t	ContentDO A	DO A	Respirato ry	prote c-	
% range	Factorh	Fac tor	tion equip	ment	Facto
> 25	1>4	1			r
	0.61 - 4	0,6	No RPE		1
	0.20,25		Filter		0,1Le
	-1	0,2	mask		vel 1
	0.1<0, 25	0,1	Air-fed mask		0,05L evel 2
	1	I	Factor		I

Skin protection	
equipment	
No gloves	1
	0,2Lev
Suitable gloves	el 1
	0,1Lev
Resistant gloves, training	el 2
Resistant gloves, specific	0,05Le
training	vel 3

PROC Factor for TRV Factor for LEV Industrial setting Factor for LEV Dermal impact

2	0.3	0.1	0.1
4	0.3	0.1	0.1
7		0.05	0.05
8a	0.3	0.1	0.01
8b	0.3	Sol 0.05	0.1
8b	0.3	Vol 0.03	0.1
2			
4		0.2	0.1

PROC	FactorPROC		Adjusted		
				factor	In-
				dustrial	
4 (high dustiness)	1	2 (high dustine		0.5	
8a (high dustiness)	1	8b (hig dustine	•	0.6	
(medium 4 dustiness)	1	2 (med dustine		0.5	
8a (medium dustiness)1		8b (me dustine			
4 (low dustiness)	1	2 (low	dustiness)	0.02	
8a (low dustiness)	1	8b (lov dustine		1	

Additional explanation

Use by private end consumers (SU 21) not considered as product is assigned for industrial use only.

Wide dispersive use (ERC 8a-8f) not assessed

No relevant substance transfer expected to marine water, sediment, or soil due to use in dedicated installations.

Environmental assessment only relevant in case of substance transfer into a waste water stream

Environmental assessment based on ACEA sector specific ERC approach (spERC factors for solids and volatiles)

The spERC approach is only applicable to demonstrate safe use of a substance for environmental aspects under REACH.

It is not suitable to demonstrate compliance with applicable local waste water regulations.

Ingestion (oral route) not assessed as not considered to occur in case of industrial / professional use Hazards due to particle shape negligible due to inclusion into polymer matrix (silicogenic or similar compounds)

Worker exposure assessment based on DNELs is only applicable to demonstrate safe use of substances under REACH.

It is not suitable to demonstrate compliance with applicable occupational exposure limits (as displayed in section 8 of SDS). Occupational exposure limits may apply for residual monomers (e.g. formaldehyde, monomeric isocyanates) which are not assessed under REACH.

Loss during service life negligible, in any case less than 1 %

Waste stage not assessed as incineration / biological treatment of waste and safe deposition of inert residues is assumed Use for coating of toys, articles designed for prolonged skin contact or indirect food contact needs further assessment No SVHC above declaration threshold contained unless disclosed in section 3 of SDS

Good practice advice

Following advice shall be pursued if exposure assessment in part 3 does not contain enough information

Recommendation to use technical room ventilation.

Recommendation for respiratory protection equipment due to dust exposure when filling feed system

Advice on respiratory protection equipment for PROC 7 is based on Wheelpaints expert judgement

Advice to use spray-booth or efficient exhaust ventilation.

Advice to wear respiratory protection equipment as standard RMM due to particle exposure for operators inside booth

Advice to wear skin/eye protection as standard RMM for powders classified as irritating (Xi)

Advice to use integrated dust evacuation, in case of air recirculation in accordance to EN 60335.

Recommendation to use respiratory protection equipment when sanding, even in combination with integrated dust evacuation.

Advice to use local exhaust ventilation according to EN 15012 for welding of coated substrates.

Recommendation to avoid contact with water.

Standardised use descriptors according European Chemical Agency (EChA) Guidance on information requirements and chemical safety assessment, chapter R.12

SU 3	Industrial uses: Uses of substances as such or in preparations at industrial sites
PC9a	Coatings and paints, thinners, paint removers
PC9b	Fillers, putties, plasters, modelling clay
PROC2	Use in closed, continuous process with occasional controlled exposure
PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises
PROC7	Industrial spraying
PROC8a	Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large con-
	tainers at non-dedicated facilities
PROC8b	Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large con-
	tainers at dedicated facilities
PROC24	High (mechanical) energy work-up of substances bound in materials and/ or articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
ERC12a	Industrial processing of articles with abrasive techniques (low release)

Glossary

SU	Sector of use
PC	Product category
PROC	Process category
ERC	Environmental release category
AC	Article category
spERC	Sector specific environmental release category (for ACEA uses)
ACEA	European automobile manufacturers association
CEPE	European council of producers and importers of paints, printing inks and artists' colours
OC	Operational condition
DOA	Duration of activity
LEV	Local exhaust ventilation
TRV	Technical room ventilation
RMM	Risk Management Measures

RPE	Respiratory protection equipment
DPE	Dermal protection equipment
WWTP	Waste water treatment plant (on-site)
STP	Sewage treatment plant (municipal)
SVHC	Substance of very high concern
LSI	Lead substance indicator
M(sperc)	Maximum volume of lead substance which can be used safely under conditions described
	by CEPE spERC
DNEL	Derived No Effect Level
DMEL	Derived minimum effect level
PNEC	Predicted No Effect Concentration
	Targeted risk assessment as proposed by European centre for ecotoxicology and toxicology of chemicals
RCR	Risk characterisation ratio