SECTION 1: SUBSTANCE/MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

1.1. Product identification
ADHESION INCREASING AGENT
UFI: GAA0-P0SG-T00R-65P8

1.2. Relevant identified uses of the substance or mixture and uses advised against
For professional use in car refinish.

1.3 Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o.
Ul. Łódzka 3
42-240 Rudniki k. Częstochowy, PL

Tel.: +48 34 329 45 03
Fax: + 48 34 320 12 16
Registration number 000029202

Person responsible for the safety data sheet: ranal@ranal.pl

1.4. Emergency telephone
+48 34 329 45 03 (8.00 - 15.00).

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
The mixture was classified as hazardous according to the regulations in force - see section 15 of the Safety Data Sheet.

Classification 1272/2008/EC:
Reproduction toxicity, hazard category 2 (Repr. 2.). Suspected of damaging the unborn child. Aspiration hazard, hazard cat . 1 (Asp. Tox. 1). May be fatal if swallowed and enters airways. Specific target organ toxicity - repeated exposure, hazard category 2 (STOT RE 2). May cause damage to organs through prolonged or repeated exposure.
Skin irritation, hazard category 2 (Skin Irrit. 2). Causes skin irritation. Specific target organ toxicity - single exposure, hazard category 3, narcotic effect (STOT SE 3). May cause drowsiness or dizziness. Flammable liquids hazard category 2 (Flam. Liq. 2). Highly flammable liquid and vapour.

2.2. Label elements

Contains: Toluene.

Pictograms:

Signal word: **Danger**.

Hazard statements (CLP):
H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (CLP):
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 +310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do not induce vomiting.

2.3. Other hazards

Does not contain PBT/vPvB substances ≥ 0.1% assessed in accordance with Annex XIII of REACH.*

The mixture does not contain any substance(s) included in the list established in accordance with Art. 59 sec. 1 of the REACH Regulation due to endocrine disrupting properties or is not identified as endocrine disrupting in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in a concentration equal to or greater than 0,1 % by weight. *

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Not applicable.

3.2. Mixtures

Substance name
Concentration [% weight]
Identification numbers
Classification and labelling

Toluene
the substance has an occupational exposure limit(s) (PL); substance with a Community-wide occupational exposure limit value *
44-49%
EC: 203-625-9
CAS: 108-88-3
Index no: 601-021-00-3
Registration no: 01-2119471310-51-XXXX
Flam. Liq. 2, H225; Repr. 2, H361d; Asp. Tox. 1; STOT RE 2, H304; H373; Skin Irrit. 2; H315; STOT SE 3, H336.

Butyl acetate
the substance has an occupational exposure limit(s) (PL); substance with a Community-wide occupational exposure limit value *
42-48%
EC: 204-658-1
CAS: 123-86-4
Index no: 607-025-00-1
Registration no: 01-2119485493-29-XXXX
Flam. Liq. 3, H226; STOT SE 3, H336.

Full text of hazard statements provided in section 16 of the Sheet.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures
General information: See section 11 of the Material Safety Data Sheet.

Airways: If difficulties in breathing occur, remove the victim to fresh air and keep at rest in a position comfortable for breathing. *

Skin: In case of skin contamination, immediately remove all contaminated clothing and wash contaminated skin with plenty of soap and water. Rinse skin with water/or shower. If skin irritation or rash occurs: Get medical advice/attention. If skin irritation persists, consult a doctor. *

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a doctor. In the case of contact with eyes, immediately rinse with plenty of water and get medical advice. *

Alimentary tract: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor. *

4.2. Most important symptoms both acute and delayed
Vapours may cause drowsiness and dizziness. Prolonged or repeated contact may cause skin dryness*. May cause eye irritation*.

4.3 Indications of any immediate medical attention and special treatment needed
Special measures should be available in the workplace for specialist and immediate assistance.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media
Suitable extinguishing agents: powder, foam resistant to alcohol, carbon dioxide, water mist.
Unsuitable extinguishing media*: full jet of water.

5.2. Special hazards arising from the substance or mixture
As a result of a fire, carbon monoxide and other toxic gases are generated.

5.3. Advice for fire fighters
Fire-fighting teams should wear self-contained breathing apparatus and light protective clothing. Cool adjacent tanks by spraying water from a safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures
For personnel non taking part in emergency procedures:
Eliminate ignition sources. Provide sufficient ventilation of the room. Avoid direct contact with the released substance. Avoid contact with skin and eyes. Personal protection measures – see section 8 of the Sheet.

For personnel taking part in emergency procedures:
Do not intervene without appropriate protective equipment. See section 8. *

6.2. Environmental precautions
Avoid release to the environment. Prevent from entering surface water and sewage system. Do not allow the product to enter groundwater, water reservoirs or sewage systems, even in small quantities. *

6.3. Methods and materials for containment and cleaning up
Cover the spilled product with a non-combustible material such as sand, earth, vermiculite. Collect the product mechanically. *

6.4. Reference to other sections
Personal protection measures – see section 8 of the Sheet. Disposal considerations – see section 13 of the Sheet.

SECTION 7: HANDLING AND STORAGE OF SUBSTANCES AND MIXTURES

7.1. Precautions for safe handling

Precautions for safe handling*: Provide good ventilation of the workplace. Keep away from heat sources, hot surfaces, sources of sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Wear personal protection measures.

Hygiene recommendations*: Wash contaminated clothes before using them again. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink and smoke when using the product. Wash hands after each contact with the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures*: Ground/bond container and receiving equipment.
Storage conditions*: Store in a well-ventilated place. Keep cool. Keep container tightly closed.

7.3 Special end use (s)
An agent that increases the adhesion of polyurethane and acrylic products to various substrates. For professional use in car refinish taking into consideration the information included in subsections 7.1 and 7.2 of the Sheet.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

8.1. Control parameters

National values of the highest permissible concentrations in the work environment and biological limit values*:

Toluene (108-88-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Toluene
IOEL TWA [ppm]	50 ppm
IOEL STEL	384 mg/m³
IOEL STEL [ppm]	100 ppm
Warning	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
Poland- The highest permissible concentration at the workplace	
Local name	Toluene
NDS (OEL TWA)	100 mg/m³
NDSCh (OEL STEL)	200 mg/m³
Regulatory reference	Official Journal 2018 item 1286
Butyl acetate (123-86-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	n-Butyl acetate
IOEL TWA [ppm]	50 ppm
IOEL STEL	723 mg/m³
IOEL STEL [ppm]	150 ppm
Regulatory reference	COMMISSION DIRECTIVE-EU) 2019/ 1831
Poland- The highest permissible concentration at the workplace	
Local name	n-butyl acetate
NDS (OEL TWA)	240 mg/m³
NDSCh (OEL STEL)	720 mg/m³
Regulatory reference	Official Journal 2018 item 1286

Monitoring method:
EN 482. Exposure at workplaces– general requirements for the characteristics of chemical agents measurement procedures.

Air pollutants are formed:
No further data available.

DNEL and PNEC:

Butyl acetate (123-86-4)	
PNEC (Water)	
PNEC (freshwater)	0.18 mg/l
PNEC (sea water)	0.018 mg/l
PNEC aqua (intermittent, freshwater)	0.36 mg/l
PNEC (Sediments)	
PNEC sediments (freshwater)	0.981 mg/kg of dry mass
PNEC sediments (sea water)	0.0981 mg/kg of dry mass
PNEC (Soil)	
PNEC Soil	0.0903 mg/kg of dry mass
PNEC (STP)	
PNEC Sewage Treatment Plant	35.6 mg/l

Risk management*:
No further data available.

8.2. Exposure control

Technical control measures*:
Provide good ventilation of the workplace.

Symbols of personal protective equipment*:

Eye or face protection*:
Safety glasses

Skin and body protection:
Proper protective clothes (coated impregnated fabrics).

Hands protection:
Protective gloves PN-EN 374-3:
Viton II, thickness 0,7 mm, penetration time 6 (>480 min.);
Nitrile rubber, thickness 0,4 mm, penetration time 2 (>30 min.).

Respiratory protection:
Gas mask with A1/ B1 type absorber (EN 14387).

Environmental control:
Prevent from penetrating into sewage system, surface water, ground water and soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties*

Physical state	liquid
Colour	straw
Odour	strong, penetrating
Odour threshold	8 mg/m^3 (toluene)
Melting/freezing point	not applicable*
Melting /freezing point	not unavailable*
Boiling point	110-140°C
Flammability*	Not applicable.
Explosive properties	not applicable
Explosion limits:	% bottom: 1.2 Vol %, top: 7.0 Vol% (toluene)
Flash point	6°C
Auto ignition point	270°C
Breakdown point	not specified
pH*	not available
Kinematic viscosity	3 mm^2/s *
Solubility (in water)	poor
n-octanol/water partition coefficient (log Kow)*	not available*
Vapour pressure	29 hPa (20°C) (toluene)
Vapour pressure at 50 °C*	not available
Density	app. 0.9 g/cm^{3*}
Relative density	not available*

Relative vapour density at 20°C*	not available
Particle characteristics*	not applicable

9.2. Other information
No data.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
The product is not reactive under normal conditions.

10.2. Chemical stability
The product is stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous reactions under normal conditions of use unknown. *

10.4. Conditions to be avoided
Protect against ignition sources. Avoid the accumulation of electrostatic charges (e.g. by grounding). Protect from sunlight. Avoid high temperatures. *

10.5. Incompatible materials
Avoid contact with large amounts of organic peroxides, strong acids and bases, as well as other strong oxidants.

10.6. Hazardous decomposition products
No hazardous product shall be formed under normal conditions of storage and use. Thermal decomposition may produce: Carbon monoxide. Other toxic gases. *

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on the hazard classes defined in Regulation (EC) No 1272/2008*

Acute toxicity*:
Acute toxicity (oral) Not classified (based on available data the classification criteria are not met).
Acute toxicity (dermal) Not classified (based on available data the classification criteria are not met).
Acute toxicity (inhalation) Not classified (based on available data the classification criteria are not met).

Toluene (108-88-3)	
LD50 oral, rat	5580 mg/kg Source: ECHA
LD50 skin, rabbit	> 5000 mg/kg Source: ECHA
LC50 inhalation - rat (vapours)	> 20 mg/l Source: ECHA
Butyl acetate (123-86-4)	
LD50 oral, rat	12.2 ml/kg Source: ECHA
LC50 inhalation - rat (vapours)	> 4.9 mg/l Source: ECHA

Skin corrosion/irritation: Causes skin irritation.

Toluene (108-88-3)	
pH	7 Source: chemicalbook
Butyl acetate (123-86-4)	
pH	6.2 Temp.: 20 °C Concentration: 5.3 g/L

Serious eye damage/eye irritation: No data confirming the hazard class.

Toluene (108-88-3)	
pH	7 Source: chemicalbook
Butyl acetate (123-86-4)	
pH	6.2 Temp.: 20 °C Concentration: 5.3 g/L

Allergic effect on airways or skin: The mixture is not classified as sensitizing. No data confirming the hazard class.
Mutagenic effect on germ cells: The mixture is not classified as mutagenic. No data confirming the hazard class.
Carcinogenicity: The mixture is not classified as carcinogenic. No data confirming the hazard class.

Toluene (108-88-3)	
IARC Group	3 - Unclassifiable

Harmful effect on reproduction: Suspected of damaging the unborn child.
Specific target organ toxicity – single exposure: May cause drowsiness or dizziness.

Toluene (108-88-3)	
Specific target organ toxicity – single exposure:	May cause drowsiness or dizziness.
Butyl acetate (123-86-4)	
Specific target organ toxicity – single exposure:	May cause drowsiness or dizziness.

Specific target organ toxicity – repeated exposure: May cause damage to organs through prolonged or repeated exposure.

Toluene (108-88-3)	
Specific target organ toxicity – repeated exposure:	May cause damage to organs through prolonged or repeated exposure.
Butyl acetate (123-86-4)	
LOAEL (oral, rat, 90 days)	500 mg/kg body weight Animal: rat, Guideline: EPA OTS 798.2650 (90-Day Oral Toxicity in Rodents)
NOAEL (oral, rat, 90 days)	125 mg/kg body weight Animal: rat, Guideline: EPA OTS 798.2650 (90-Day Oral Toxicity in Rodents)

Aspiration hazard: May be fatal if swallowed and enters airways.

mixture	
Kinematic viscosity	3 mm²/s
Butyl acetate (123-86-4)	
Kinematic viscosity	0.83 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

11.2 Information on other hazards*
No further data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Hazardous for the aquatic environment, short-time (acute): Not classified (based on available data the classification criteria are not met).
Hazardous to the aquatic environment, long-term (chronic): Not classified (based on available data the classification criteria are not met).
It is not easily degradable.

Toluene (108-88-3)	
LC50 - Fish [1]	5.5 mg/l Source: ECHA
Butyl acetate (123-86-4)	
LC50 - Fish [1]	18 mg/l Source: ECHA
EC50 - Crustaceans [1]	44 mg/l Source: ECHA
EC50 - Other aquatic organisms [1]	32 mg/l Test organisms (species): Artemia salina
EC50 72h - Algae [1]	674.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	246 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	47.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	23.2 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability
No data.

12.3. Bioaccumulative potential

Toluene (108-88-3)	
n-octanol/water partition coefficient (Log Pow):	2.73 Source: HSDB
Butyl acetate (123-86-4)	
n-octanol/water partition coefficient (Log Pow):	1.78 Source: HSDB

12.4. Mobility in soil
No further data available. *

12.5. Results of PBT and vPvB assessment
No data.

12.6. Endocrine disrupting properties*
No further data available. *

12.7. Other hazardous effects*
No data.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Dispose of according to applicable local and official waste regulations – see section 15.
Contaminated container should be handed over to entities, which are authorized to collect, recover or dispose of wastes.

Product remains:
Waste code: 08 01 11
Waste paints and varnishes containing organic solvents or other dangerous substances. Do not discharge the product into the sewage system. Must not be disposed of with municipal waste. The remains of the product in the packaging should be carefully removed and allowed to dry completely (only in well-ventilated rooms).
ATTENTION: The remains should be dried only in well-ventilated rooms, away from flammable products.

Contaminated packaging:
Packaging containing unhardened product remains is hazardous waste.
Waste code: 15 01 10
Packaging containing residues of or contaminated by dangerous substances (e.g. pesticides of I and II class of toxicity – very toxic and toxic). Must not be disposed of with municipal waste. Contaminated container should be handed over to entities, which are authorized to collect, recover or dispose of wastes.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number*
1263 *

14.2. UN proper shipping name
*

ADR	PAINT RELATED MATERIAL
IMDG	PAINT RELATED MATERIAL
IATA	Paint related material

Description of the shipping document*:
ADR: 1263 PAINT RELATED MATERIAL, 3, II, (D/E)
IMDG: UN 1263 PAINT RELATED MATERIAL, 3, II (6°C c.c.)
IATA: UN 1263 Paint related material, 3, II

14.3. Transport hazard class (-es)
3

*

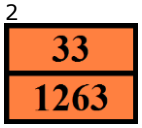
14.4. Packaging group
II

14.5. Environmental hazards

Environmentally hazardous: No.
IMDG: Marine pollutants: No.

14.6. Special precautions for users

Road transport*:

Classification code (ADR):	F1
Limited Quantities (ADR):	5 l
Special packing provisions (ADR):	PP1
Mixed Packing Regulations (ADR):	MP19
Transport category (ADR):	2
Orange Tiles:	
Tunnel restriction code (ADR):	D/E

Sea transport*:

Special provisions (IMDG):	163, 367
Limited quantities (IMDG)	5 L
Special packing provisions (IMDG):	PP1
EmS number (Fire):	F-E
EmS number (Spillage):	S-E
Cargo Stowage Category (IMDG):	B

Air transport:
No data.

14.7. Sea transport in accordance with IMO instruments*
Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations / legislations specific for the substance or mixture

EU Provisions*:
- Annex XVII to the REACH Regulation (restriction conditions): It does not contain substances listed in Annex XVII to the REACH Regulation (restriction conditions).
- Annex XIV to the REACH Regulation (List of Authorizations): It does not contain substances listed in Annex XIV to the REACH Regulation (List of Authorizations).
- REACH Candidate List (SVHC): Contains no substances listed on the REACH Candidate List.
- PIC Regulation (EU 649/2012, Prior Informed Consent): It does not contain substances listed on the PIC list (EU Regulation 649/2012 on the export and import of dangerous chemicals).
- POP Regulation (EU 2019/1021, Persistent Organic Pollutants): It does not contain substances listed on the POP list (EU Regulation 2019/1021 on the export and import of dangerous chemicals).
- Ozone Depletion Regulation (EU 1005/2009): Contains no substances listed in the ozone depleting list (EU Regulation 1005/2009 on substances that deplete the ozone layer).
- Explosives Precursors Regulation (EU 2019/1148): It does not contain substances listed on the list of explosives precursors (EU Regulation 2019/1148 on the marketing and use of explosives precursors).
- Drug Precursors Regulation (EC 273/2004): It contains substance(s) listed on the list of drug precursors (Regulation EC 273/2004 on the manufacture and marketing of certain substances used for the illicit manufacture of narcotic drugs and psychotropic substances).

Name	CN marking	CAS number:	CN code:	Category	Limit	ANNEX
Toluene		108-88-3	2902 30 00	Category 3		ANNEX I

Other regulations (Poland)*:
- Material Safety Data Sheet EU format according to Commission Regulation (EU) 2020/878.
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- ADR Agreement: Government Statement of February 18, 2021 on the entry into force of amendments to Annexes A and B of the European Agreement on the International Carriage of Dangerous Goods by Road (ADR), drawn up in Geneva on September 30, 1957. (Journal of Laws of 2019, , item 874).

15.2. Chemical safety assessment
Not performed.

SECTION 16: OTHER INFORMATION

Full text of hazard statements H phrases mentioned in section 2 - 15 of the Sheet:
Asp. Tox. 1 Aspiration hazard.
Flam. Liq. 2 Flammable liquids, cat. 2,
Flam. Liq. 3 Flammable liquids, cat. 3.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation (category 2)
H336 May cause drowsiness or dizziness
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
Repr. 2 Reproduction toxicity, cat. 2,
Skin Irrit. 2 Skin corrosion/irritation, cat. 2
STOT RE 2 Specific target organ toxicity – repeated exposure, cat. 2.
STOT SE 3 Specific target organ toxicity – single exposure, cat. 3

Explanation of abbreviations and acronyms used in the MSDS:
ADN European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE Estimated acute toxicity
BCF BCF bioconcentration factor
BLV Quantitative limit value
BOD Biochemical Oxygen Demand (BOD)
COD Chemical oxygen demand (COD)
DMEL Derived level causing minimal changes
DNEL Derived no effect level
EC number: European Community number
EC50 Medium effective concentration

EN European standard
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IMDG International Maritime Code for Dangerous Goods
LC50 The concentration of the substance causing the death of 50% of the population of test organisms
LD50 The Dose causing the death of 50% of the population of test organisms
LOAEL The lowest level at which harmful changes are observed
NOAEC Concentration at which no adverse effects are observed
NOAEL Dose level at which no adverse effects are observed
NOEC Maximum Concentration at which no adverse effects are observed
OECD Organization for Economic Cooperation and Development
OEL Occupational exposure limit value
PBT Substance, which is Persistent, Bio-accumulative and toxic
PNEC Predicted no-effect concentration
RID Regulations Concerning the International Transport of Dangerous Goods by Rail
SDS Material Safety Sheet
STP Sewage Treatment Plant
ThOD Theoretical Oxygen Demand (ThOD)
TLM Middle tolerance limit
VOC Volatile Organic Compounds
CAS number CAS number
N.O.S. Not otherwise specified
vPvB very Persistent and very Bio-accumulative
ED Endocrine disrupting properties

Classification was made using the calculation method in accordance with the classification rules contained in Regulation No. 1272/2008/EC.

Classification and procedure used to determine the classification of mixtures according to the Regulation (EC) 1272/2008[CLP]		
Flam. Liq. 2	H225	Expert assessment
Skin Irrit. 2	H315	Calculation method
Repr. 2	H361d	Expert assessment
STOT SE 3	H336	Expert assessment
STOT RE 2	H373	Calculation method
Asp. Tox. 1	H304	Calculation method

Other data sources:
ECHA European Chemicals Agency
TOXNET Toxicology Data Network

Changes in the Sheet compared to the previous version:
Update of sections:
9: rewording of sub-section 9.1: Information on basic physical and chemical properties
11: rewording of sub-section 11.1: Information on the hazard classes defined in Regulation (EC) No 1272/ 2008: added subsection 11.2. Information on other hazards
12: new subsection 12.6: Endocrine disrupting properties.
14: rewording of sub-section 14.1: UN number or ID number; rewording of sub-section 14.7: Sea transport in bulk in accordance with IMO instruments.

Changes in the content of sections:
2.3, 3.2, 4.1, 4.2, 5.1, 6.1, 6.2, 7.1, 7.2, 8.1, 8.2, 9.1, 10.3, 10.4, 10.6, 11.1, 11.2, 12.1, 12.3, 12.4, 12.6, 12.7, 14.1, 14.2, 14.3, 14.6, 14.7, 15.1, 16.
General update.

Sheet number: 06-0P1L-0123-V4