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

1.1 Product identification
RUST CONVERTER
UFI: 1GM0-U0MY-K00P-YQ15

1.2. Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

Application of the substance / the mixture:
Protective coating.

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 34 322 28 77 (8.00 -15.00)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

GHS02 flame

Aerosol 1	H226	Flammable liquid and vapour.

GHS08 health hazard

Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.

GHS09 environment

Aquatic Chronic 2	H411	Toxic to aquatic life with long-lasting effects.

GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Eye Irrit. 2	H319	Causes serious eye irritation.
STOT SE 3	H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:
The product is classified and labelled according to the CLP regulation.

Pictograms:

GHS02 GHS07 GHS08 GHS09

Signal word: **Danger.**

Hazard-determining components of labelling:
C9 hydrocarbons, aromatics
aromatic polyisocyanate prepolymer
xylene
toluene diisocyanate

Hazard statements:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H304	May be fatal if swallowed and enters airways.
H411	Toxic to aquatic life with long-lasting effects.

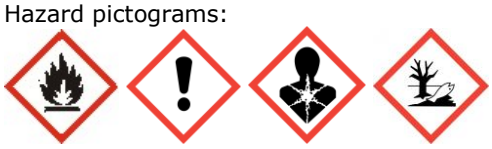
Precautionary statements:

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see … on this label).
P331	Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P362+P364	Take off contaminated clothing and wash it before reuse.

Additional information:
EUH204 Contains isocyanates. May produce an allergic reaction.
The product is intended for professional use only.

Labelling of packages where the contents do not exceed 125 ml:

Hazard pictograms:



GHS02 GHS07 GHS08 GHS09

Signal word: **Danger**

Hazard-determining components for labelling:
C9 hydrocarbons, aromatics
aromatic polyisocyanate prepolymer
xylene
toluene diisocyanate

Hazard statements:

H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H304	May be fatal if swallowed and enters airways.

Precautionary statements:

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see … on this label).
P331	Do NOT induce vomiting.
P362+P364	Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances
Not applicable.

3.2. Mixtures

Description: Mixture of substances listed below with safe additives.

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

C9 hydrocarbons, aromatics
CAS: 64742-95-6
EC number: 918-668-5
Reg.no: 01-2119455851-35
Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336
25-50%

aromatic polyisocyanate prepolymer
CAS: 68958-67-8
Eye Irrit. 2, H319; Skin Sens. 1, H317
10-25%

2-methoxy-1-methylethyl acetate
CAS: 108-65-6
EINECS: 203-603-9
Reg.no: 01-2119475791-29
Flam. Liq. 3, H226; STOT SE 3, H336
10-25%

Butyl acetate
CAS: 123-86-4
EINECS: 204-658-1
Reg.no: 01-2119485493-29
Flam. Liq. 3, H226; ~_ STOT SE 3, H336
≤20%

Xylene
CAS: 1330-20-7
EINECS: 215-535-7
Reg.no: 01-2119488216-32
Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304;
Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315;
Eye Irrit. 2, H319; STOT SE 3, H335
≥10-<15%

Ethylbenzene
CAS: 100-41-4
EINECS: 202-849-4
Reg.no: 01-2119489370-35
Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304;
Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319;
Aquatic Chronic 3, H412
<2.5%

Toluene diisocyanate
CAS: 26471-62-5
EINECS: 247-722-4
Reg.no: 01-2119454791-34
Acute Tox. 1, H330; Resp. Sens. 1, H334; Carc. 2, H351;
Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317;
STOT SE 3, H335; Aquatic Chronic 3, H412
≥0.1-<1%

Additional information:
For the full text of the listed hazard phrases refer to section 16 of the Sheet.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:
Immediately remove any clothing contaminated by the product.
If breathing is irregular or stopped, perform artificial respiration.

Inhalation:
Supply plenty of fresh air and call a doctor.
In case of unconsciousness place patient in a stable side position for transport.

After skin contact:
In general the product does not cause skin irritation.
Immediately rinse with water.

After contact with eyes:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After ingestion:
Immediately consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Exposure effects: The most important acute and delayed symptoms and effects of exposure are described on the label (see section 2) and / or section 11.

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

No further relevant information available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing agents

Suitable extinguishing agents:
CO2, extinguishing powder or water stream. Fight larger fires with water stream or alcohol resistant foam.

Extinguishing agents unsuitable for safety reasons:
Full jet of water.

5.2. Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are released.

During a fire, the following may be released:
Nitrogen oxides (NOx)
Carbon monoxide (CO)
Hydrogen cyanide (HCN)

5.3. Advice for firefighters

Protective equipment:
Wear respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Wear protective clothing. Move unsecured persons to a safe place.

6.2. Environmental precautions

Prevent seepage into sewage system or water reservoirs. Inform respective authorities in case of seepage into water reservoir or sewage system. Prevent from entering sewage system, surface or ground water.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders,
universal binders, sawdust) Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation.

6.4. Reference to other sections

Information on safe handling – see section 7 of the Sheet.
Information on personal protection equipment – 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

Ensure good ventilation/exhaustion at the workplace.
Avoid spraying.

Information on fire and explosion protection:
Keep away from the sources of fire – No smoking.
Protect against electrostatic charges.
Keep respiratory protection at hand.

7.2. Conditions for safe storage, including any incompatibilities

Storage:
Requirements to be met by storerooms and receptacles:
No special requirements.

Information on storage in one common storage facility:
Do not store together with reducing agents, heavy metal compounds, acids and alkalis.
Do not store in contact with foodstuffs.

Further information on storage conditions:
Keep the containers tightly sealed.

Storage class: 3

7.3. Special end use(s)
No further relevant information available.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

8.1. Control parameters

Additional information on design of technical facilities:
No further data; see Section 7 of the Sheet.

Components with limit values that require monitoring at the workplace:

108-65-6 2-methoxy-1-methylethyl acetate
MPIC: 520 mg/m^3
MPC: 260 mg/m^3
skin

123-86-4 butyl acetate
MPIC: 720 mg/m^3
MPC: 240 mg/m^3

1330-20-7 xylene
MPIC: 200 mg/m^3
MPC: 100 mg/m^3
skin

100-41-4 ethylbenzene
MPIC: 400 mg/m^3
MPC: 200 mg/m^3
skin

26471-62-5 toluene diisocyanate
MPIC: 0.021 mg/m^3
MPC: 0.007 mg/m^3

Additional information:
Current lists were used as basis.

8.2. Exposure control

Personal protective equipment:
General measures of protection and hygiene: Keep away from food, beverages and animal feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with eyes. Avoid contact with eyes and skin.

Respiratory protection:

For brief or minor exposure a breathing filter device; in the event of intensive or longer exposure, use an independent respiratory protection device.

Hands protection:

Protective gloves.

Due to the lack of testing, no recommendation can be made for a glove material for protection against the product / preparation / chemical mixture. Selection of the glove material on consideration of the breakthrough times, rates of diffusion and the degradation.

The glove material has to be impermeable and resistant to the product / the substance / the preparation.

Material of gloves
The selection of the right gloves does not only depend on the material, but also on other quality characteristics and varies from manufacturer to manufacturer. As the product is a mixture of different substances, resistance of the glove material cannot be determined in advance and should therefore be checked before using the product.

Penetration time of the glove material
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tight protective glasses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:	
Appearance:	
Form:	liquid
Colour:	according to product name
Odour:	characteristic
Odour threshold:	Not specified.
pH-value at 20°C:	Not specified.
Changes of state:	
Melting/freezing point:	Not specified.
Initial boiling point and boiling range:	124-128°C
Flash point:	25°C (DIN 53213)
Flammability (solid, gas):	Not applicable.
Combustion temperature:	315°C (DIN 51794)
Breakdown point:	Not specified.
Auto ignition point:	the product is not self-igniting.
Explosive properties:	the product is not explosive, however formation of explosive air/vapour mixtures is possible.
Explosion limits:	
Bottom:	0,7 Vol %
Top:	10,8 Vol %
Vapour pressure at 20°C:	10,7 hPa
Density at 20°C:	0,941 g/cm³ (DIN 53217)
Relative density	not specified.
Vapour density	not specified.
Evaporation rate	not specified.
Solubility in / miscibility with water:	not miscible or difficult to mix
n-octanol/water partition coefficient:	Not specified.

Viscosity:	
Dynamic:	Not specified.
Kinematic w 20°C:	13 s (DIN 53211/4)
Solvent content:	
VOC (EC):	79.87%
Solids content:	20.1%

9.2 Other information
No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
No further relevant information available.

10.2. Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specification.

10.3. Possibility of hazardous reactions
Hazardous reactions unknown.

10.4. Conditions to avoid
See section 7.1.

10.5. Incompatible materials
No further relevant information available.

10.6. Hazardous decomposition products
Possible traces of
Nitrous gases.
Hydrogen chloride (HCl).
Hydrogen cyanide.
Carbon monoxide.
Nitrogen oxides (NOx)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

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

LD/LC50 values relevant for classification
64742-95-6 C9 hydrocarbons, aromatics

Oral	LD50	>2.000 mg/kg	(rat)
Dermal	LD50	>2.000 mg/kg	(rabbit)

1330-20-7 xylene

Oral	LD50	5.251 mg/kg	(rat)
Dermal	LD50	>5.000 mg/kg	(rabbit)
Inhalation	LC50/4 h	29 mg/l	(rat)

26471-62-5 toluene diisocyanate

Oral	LD50	5.110 mg/kg	(rat)
Inhalation	LC50/4 h	107 mg/l	(rat) (Aerosol)

Main effects of the harmful influence:
Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye irritation.
Allergic effect on respiratory tract or skin: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Additional toxicological information:
Carcinogenicity, mutagenicity and harmful effect on reproduction (CMR):
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Harmful effect on reproduction: Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure: May cause respiratory irritation. May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard: May be fatal if swallowed and enters airways.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity:
No further relevant information available.

12.2. Persistence and degradability
No further relevant information available.

12.3. Bioaccumulative potential
No further relevant information available.

12.4. Mobility in soil
No further relevant information available.

Ecotoxic effects:
Warning: Poisonous to fish.
Additional ecological information:

General information:
Water hazard class 2 (Self-assessment): harmful to water
Do not allow product to reach ground water, surface water or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Harmful to aquatic organisms.

12.5. Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6. Other hazardous effects
No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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

European waste catalogue:
08 01 11* Waste paint and varnish containing organic solvents or other hazardous substances.

Uncleaned packaging:
Recommendation: Dispose of according to current regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number
ADR, IMDG, IATA: UN1263

14.2. UN proper shipping name
ADR: UN1263 PAINT RELATED MATERIAL, ENVIRONMENTALLY HAZARDOUS
IMDG: PAINT RELATED MATERIAL (Solvent naphtha), MARINE POLLUTANT
IATA: PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR

Class: 3 F1 Flammable liquids.
Label: 3

IMDG

Class: 3 flammable liquids.
Label: 3

IATA

Class: 3 flammable liquids.
Label: 3

14.4. Packing group
ADR, IMDG, IATA: III

14.5. Environmental hazards

The product contains environmentally hazardous materials:
C9 hydrocarbons, aromatics

Marine pollutant:
Yes.
Symbol (fish and tree)

Special labelling (ADR):
Symbol (fish and tree)

14.6. Special precautions for user
Warning: Flammable liquids.
Hazard code (Kemler): 30
EMS number: F-E,S-E

Stowage Category: A

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Transport/Additional information:
ADR
Limited quantities (LQ): 5L
Transport category: 3
Tunnel restriction code: code D/E

IMDG
Limited quantities (LQ): 5L

UN Model Regulation: UN 1263 PAINT RELATED MATERIAL, 3, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: REGULATORY INFORMATION

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

• 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), Official Journal of the EU L396, of December 30 2006 with following amendments.

Labelling in accordance with Regulation (EC) No 1272/2008:
• 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 with following amendments.
Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
Directive 2008/98 / EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives with following amendments.
Directive 94/62 / EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste, with following amendments.

GHS label elements

Directive 2012/18/EU of the European Parliament and of the Council
Named dangerous substances – ANNEX I:
None of the components is listed.

Seveso category
E2 Water hazardous
P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements
200 t
Qualifying quantity (tonnes) for the application of upper-tier requirements
500 t
Regulation (EC) No 1907/2006 ANNEX XVII Restriction conditions: 3, 74

Directive 2011/65 / EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex II:
None of the components is listed.

National regulations:
Additional classification according to the Regulation on hazardous materials, Annex II:

Class	**Share in %**
I	≥0,1-<1
NK	50-100

15.2. Chemical safety assessment
Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

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

Relevant phrases:
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long-lasting effects.
H412 Harmful to aquatic life with long-lasting effects.

Classification according to Regulation (EC) No. 1272/2008
In accordance with Directive 1272/2008 (EU), classification of a mixture is based on a calculation method using the given materials.

Abbreviations and acronyms:
RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the
International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord europeen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International
Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 1: Acute toxicity – Category 1
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation - Category 2
Resp. Sens. 1: Respiratory irritation - Category 1
Skin Sens. 1: Skin sensitization – Category 1
Carc. 2: Carcinogenicity - Category 2
STOT SE 3: Specific target organ toxicity (single exposure) - Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2
Asp. Tox. 1: Aspiration hazard - Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term hazard to the aquatic environment - Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term hazard to the aquatic environment - Category 3

Changes in the sheet compared to the previous version:

Sheet number: 06-1D5E-0621-V1