Safety Data Sheet
Nordflex PUR-B 0104

Safety Data Sheet dated 3/2/2014, version 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:
Trade name: Nordflex
PUR-B 0104
Trade code: PUR-B 0104

1.2. Relevant identified uses of the substance or mixture and uses advised against

2K Polyurethane enamel for industrial use.
Only for professional use.
Not for autobody shop use.

1.3. Details of the supplier of the safety data sheet

Company:
Ind. Chimica Reggiana I.C.R. Spa
Via Gasparini, 7 42124 REGGIO EMILIA Italia
Tel. +39 0522/517803 Fax +39 0522/514384

Competent person responsible for the safety data sheet:
sdsre@icrsprint.it

1.4. Emergency telephone number

Tel. +39 0522-517803

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:
Properties / Symbols:
F Highly flammable
Xn Harmful
R Phrases:
R11 Highly flammable.
R20/21 Harmful by inhalation and in contact with skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

EC regulation criteria 1272/2008 (CLP):


Danger, Flam. Liq. 2, Highly flammable liquid and vapour.


Warning, Acute Tox. 4, Harmful if inhaled.


Warning, Acute Tox. 4, Harmful in contact with skin.


Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure if inhaled.

Adverse physicochemical, human health and environmental effects:
No other hazards

2.2. Label elements

Symbols:
Xn Harmful
F Highly flammable
R Phrases:
R11 Highly flammable.
R20/21 Harmful by inhalation and in contact with skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
S Phrases:
S23 Do not breathe spray
S25 Avoid contact with eyes.
S29 Do not empty into drains.
S36/37 Wear suitable protective clothing and gloves.
S51 Use only in well-ventilated areas.
S7/9 Keep container tightly closed and in a well-ventilated place.
Contents:
Xylene

Symbols:

Danger
Hazard statements:
H225 Highly flammable liquid and vapour.

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H312+H332 Harmful in contact with skin or if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements:

P260 Do not breathe vapours.
P271 Use only outdoors or in a well-ventilated area.
P280.D Wear protective gloves and clothing and eye protection.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contents:

Xylene

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

10% - 12.5% Xylene

REACH No.: 01-2119488216-32, Index number: 601-022-01-6, CAS: 1330-20-7, EC: 215-535-7
Xn,Xi; R36/37/38-48/20-65-10-20/21


2.6/3 Flam. Liq. 3 H226


3.1/4/Inhal Acute Tox. 4 H332


3.1/4/Dermal Acute Tox. 4 H312


3.3/2 Eye Irrit. 2 H319


3.8/3 STOT SE 3 H335


3.2/2 Skin Irrit. 2 H315


3.9/2 STOT RE 2 H373


3.10/1 Asp. Tox. 1 H304

7% - 10% 2-methoxy-1-methylethyl acetate

REACH No.: 01-2119475791-29, Index number: 607-195-00-7, CAS: 108-65-6, EC: 203-603-9
R66-10; substance with a Community workplace exposure limit


2.6/3 Flam. Liq. 3 H226

0.25% - 0.5% ethylbenzene

REACH No.: 01-2119489370-35, Index number: 601-023-00-4, CAS: 100-41-4, EC: 202-849-4
F,Xn; R11-20


2.6/2 Flam. Liq. 2 H225


3.1/4/Inhal Acute Tox. 4 H332

DECLJ*

*DECLJ: Substance classified accordingly to Note J of the Annex I of directive 67/548/EEC. The 'Carcinogenic' classification is not necessary if you can demonstrate that the substance contains less than 0.1% weight/weight of benzene

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SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediatley and dispose off safely.

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After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

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

See section 11 for known symptoms and effects.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguishe.

Extinguishing media which must not be used for safety reasons:

Do not use water jets. Water may noty be effective fire fighting measure, however it can be used to cool closed containers close to flames as to avoid bursting and exploding.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible

absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Always keep the containers tightly closed.

Always keep in a well ventilated place.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

See Point 1.2.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Xylene - CAS: 1330-20-7

EU - LTE(8h): 221 mg/m3, 50 ppm - STE(): 442 mg/m3, 100 ppm - Notes: Assorbito attraverso la pelle

ACGIH - LTE(8h): 221 mg/m3, 50 ppm - STE(): 442 mg/m3, 100 ppm

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

EU - LTE(8h): 275 mg/m3, 50 ppm - STE: 550 mg/m3, 100 ppm

ethylbenzene - CAS: 100-41-4

EU - LTE: 442 mg/m3, 100 ppm - STE: 884 mg/m3, 200 ppm

DNEL Exposure Limit Values

Xylene - CAS: 1330-20-7

Worker Professional: 289 mg/kg - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 180 mg/kg - Consumer: 108 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 77 mg/m³ - Consumer: 14.8 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 1.6 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Xylene - CAS: 1330-20-7

Target: STP - Value: 6.58 mg/l

Target: Marine water - Value: 0.327 mg/l

Target: Intermittent emissions - Value: 0.327 mg/l

Target: Freshwater sediments - Value: 12.46 mg/kg

Target: Marine water sediments - Value: 12.46 mg/kg

Target: Soil - Value: 2.31 mg/kg

Target: Fresh Water - Value: 0.327 mg/l

8.2. Exposure controls

Eye protection:

Use face-mask or close fitting safety goggles (e.g. EN166 F3). Do not wear contact lenses.

Protection for skin:

Wear safety clothing that ensure full skin protection in accordance to EN 14605 Type 4 in case of spills or spray (e.g. Tyrek). Please note: safety clothing must be changed immediately if it comes in contact with product.

Protection for hands:

Use protective gloves that provides comprehensive protection, EN374 Class 3 (B-F-I). Permeation time > 30 minutes; 0.4 mm thickness.

Respiratory protection:

Use adequate protective respiratory devices, using Filter “A” (Brown colour) for organic gas and vapors with boiling points over 65°C.

Thermal Hazards:

None

Environmental exposure controls:

Emissions from ventilation systems or from work processes must be check as to ensure compliance to environmental protection legistation. In some cases the addition of vapour scrubbers, filters or other system modification may be necessary in order to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	Transparent liquid
Odour:	Typical of solvent
Odour threshold:	N.D.
pH:	N.A. (organic solvent)
Melting point / freezing point:	N.D.
Initial boiling point and boiling range:	118 °C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	0,9 - 7 % vol
Vapour density:	N.D.
Flash point:	17,8 °C
Evaporation rate:	N.D.
Vapour pressure:	16,7 hPa
Relative density:	1,03 ± 0,05 g/cm³
Solubility in water:	Insoluble
Solubility in oil:	N.D.
Auto-ignition temperature:	432°C - 528°C
Explosive properties:	N.D.
Oxidizing properties:	N.D.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

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Stable under recommended use and storage conditions (see point 7).

10.3. Possibility of hazardous reactions

It may catch fire on contact with oxidising mineral acids, and powerful oxidising agents.

10.4. Conditions to avoid

Avoid accumulating electrostatic charge.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Xylene - CAS: 1330-20-7

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 6350 Ppm - Duration: 4h
Test: LD50 - Route: Oral - Species: Rat = 3523 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit = 4350 mg/kg

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 35.7 mg/l
Test: LD50 - Route: Oral - Species: Rat = 8500 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/l

ethylbenzene - CAS: 100-41-4

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Mouse = 35500 mg/m3
Test: LC50 - Route: Inhalation - Species: Rat = 55000 mg/m3
Test: LD50 - Route: Oral - Species: Rat = 3500 mg/kg

Xylene - CAS: 1330-20-7

OBSERVATIONS ON HUMAN SUBJECTS NON-PROFESSIONAL EXPOSURE - Effects following acute exposure:
Symptoms of intense exposure are: dermatitis, eczema, irritation to the eyes and to the respiratory tract. Inhaling the vapours can cause dizziness, headache, nausea, incoordination, excitability, narcosis, anaemia, and paraesthesia of the hands and feet.
PROFESSIONAL EXPOSURE - Effects following acute exposure:
Narcotic at high concentrations.
Irritation through inhalation at 200 ppm (TCLo). Inhalation of 200 ppm has irritating effects in human subjects.
Human subject (oral)(LDLo): 50 mg/kg.
Inhalatory human subject (LCLo) 10000 ppm/6h.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
d) respiratory or skin sensitisation;
e) germ cell mutagenicity;
f) carcinogenicity;
g) reproductive toxicity;
h) STOT-single exposure;
i) STOT-repeated exposure;
j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

12.2. Persistence and degradability

Not persistent and Biodegradable

12.3. Bioaccumulative potential

Not bioaccumulative

12.4. Mobility in soil

Do not mix with waste water, rain or surface water. Floats on water, evaporates from liquid and solid surfaces but a signicant amount may penerate and pollute water table.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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The empty containers must be considered special waste materials to take to dump of type 2B. If previously cleansed, they can be admitted in first class dumps.
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

Limited quantities, not subject to ADR norms for internal packaging of up to 5 litres and maxium packaging of 30kg.

14.1. UN number

ADR-UN number:	1263
IMDG-Un number:	1263

14.2. UN proper shipping name

Shipping name:	Paints

14.3. Transport hazard class(es)

ADR/RID:	
Class:	3
Label:	3
Classification Code:	F1
Maritime (IMDG/IMO):	
Class:	3.2
Label:	3

14.4. Packing group

ADR Packing Group::	II
IMDG-Packing group:	II

14.5. Environmental hazards

Marine pollutant:	No

14.6. Special precautions for user

IMDG-EMS:	F-E, S-E

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No

SECTION 15: Regulatory information

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

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Dir. 2006/8/EC
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP)
Regulation (EU) n. 453/2010 (Annex I)
Regulation (EU) n. 286/2011 (ATP 2 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Volatile Organic compounds - VOCs =425.83 g/Kg= 438.60 g/l
Volatile CMR substances = 0.00 %
Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %
Organic Carbon - C = 0.29

Where applicable, refer to the following regulatory provisions :

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

15.2. Chemical safety assessment

No

SECTION 16: Other information

Text of phrases referred to under heading 3:

R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.
R20/21 Harmful by inhalation and in contact with skin.
R36/37/38 Irritating to eyes, respiratory system and skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.

H226 Flammable liquid and vapour.
H332 Harmful if inhaled.
H312 Harmful in contact with skin.

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H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H315 Causes skin irritation.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
H304 May be fatal if swallowed and enters airways.
H225 Highly flammable liquid and vapour.

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
CCNL - Appendix 1
Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
N.A.:	Not applicable.
N.D.:	Not determined.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

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