Date of issue: 20.05.2015 Replaces Data Sheet of: 28.03.2008
"*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available

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

1.1 **Product identifier**

Trade Name: **Kipp 2K-PUR Flächenfarbe, Komponente B lösemittelhaltig**
Article No.: n.av.
Preparation No.: 32
Registration No.: n.av.

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

Use: Colour

1.3 **Details of the supplier of the safety data sheet**

1.3.1 **Address of the Company / Supplier:**

Kipp GmbH, Murrstraße 1, D- 70806 Kornwestheim
Telephone: +49 - 7154-82420, Telefax: +49 – 7154-824210, E-Mail: info@lipp-line.de

1.4 **Emergency telephone number**

Emergency - Telephone of Company / Undertaking
Telephone: +49 - 7154-82420 (8:00 – 16:30)

Information Centre Specialising in Symptoms of Poisoning
Telephone: +44 870 600 6266

SECTION 2: Hazards identification

2.1 **Classification of the substance or mixture**

Classification and labelling according to Directive 1272/2008/EC:
Flam. Liq. 3; H226 / Acute Tox. 4; H332 / Skin Sens. 1; H317 / STOT SE 3; H335
Classification and labelling according to Directive 1999/45/EC:
Flammable R 10 / Harmful R 20 / Irritant R 37 / Sensitizing R 43

2.2 **Label elements**

Classification according to 1272/2008/EC: Yes.
Applicable Exemptions: No.
Signal word(s): Warning
Component(s): contains. Hexamethylene diisocyanate, oligomers

Hazard pictogram(s):

H - Phrases:
H226: Flammable liquid and vapour.
H332: Harmful if inhaled.
H317: May cause an allergic skin reaction.
H335: May cause respiratory irritation.

P - Phrases:
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER/doctor if you feel unwell.

Additional Markings: EUH204: Contains isocyanates. May produce an allergic reaction.
The above mentioned labelling is valid for distribution to industrial user.

2.3 **Other hazards**

None.

SECTION 3: Composition/information on ingredients

3.1 **Substances**
n. ap.

3.2 **Mixtures**
Chemical Characterisation:
Solvent-borne colour
Dangerous Ingredients:

CAS - No.	Index - No.	EC - No.	Material	m% - range	Symbol	R / H - phrases
28182-81-2	n.av.	500-060-2	Hexamethylene diisocyanate, oligomers	50 - 75%	Xn GHS07	R 20-37-43 H332 H317 H335
822-06-0	615-011-00-1	212-485-8	Hexamethylene diisocyanate	0,1 - 0,5%	T GHS06 GHS08	R 23-36/37/38-42/43 H331 H319 H335 H315 H334 H317
108-65-6	607-195-00-7	203-603-9	2-Methoxy-1-methylethyl acetate	15 - 25%	n.ap.	R 10 H226

Text of R-/H- phrases: see section 16

SECTION 4: First aid measures

4.1 **Description of first aid measures**

4.1.1 **Inhalation:**
Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.
Consult a physician. Show this safety data sheet to the doctor in attendance.

4.1.2 **Skin Contact:**
Wash off immediately with soap and plenty of water.
In the case of skin irritation or allergic reactions see a physician.

4.1.3 **Eye Contact:**
Call a physician immediately.
In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

4.1.4 **Ingestion:**
Call a physician immediately.
Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting.

4.2 **Most important symptoms and effects, both acute and delayed**
Inhalation may provoke the following symptoms: Daze headache.
May produce an allergic reaction.

4.3 **Indication of any immediate medical attention and special treatment needed**
Treat symptomatically. Risk of product entering the lungs on vomiting after ingestion.

SECTION 5: Firefighting measures

5.1 **Extinguishing media**

5.1.1 **Suitable Extinguishing Media:**
Use dry chemical, CO_2, water spray or "alcohol" foam.

5.1.2 **Extinguishing Media to Avoid:**
None.

5.2 **Special hazards arising from the substance or mixture**
In the event of fire carbon oxides nitrogen oxides (NO_x) isocyanides may be formed.

5.3 **Advice for firefighters**

5.3.1 **Special Protective Equipment:**
Wear positive pressure self-contained breathing apparatus. Wear full protective clothing.

5.3.2 **Additional Information:**
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Sweep up or vacuum up spillage and collect in suitable container for disposal.
Humid air and/or water will produce carbon dioxide which will pressurize the container.

SECTION 6: Accidental release measures

6.1 **Personal precautions, protective equipment and emergency procedures**
See chapter 8.2.2
Ensure adequate ventilation. Keep away from sources of ignition - No smoking.

6.2 **Environmental precautions**
Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

6.3 **Methods and material for containment and cleaning up**
Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
Do not keep container sealed.

6.4 **Reference to other sections**
None.

SECTION 7: Handling and storage

7.1 **Precautions for safe handling**

7.1.1 **Precautions for Safe Handling:**
Do not breathe vapours or spray mist. Avoid contact with the skin and the eyes.
When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.
Wash hands before breaks and at the end of workday. Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

7.1.2 **Precautions in Case of Fire and Explosion:**
Keep away from sources of ignition - No smoking.

7.2 **Conditions for safe storage, including any incompatibilities**

7.2.1 **Storage Instructions:**
Keep in an area equipped with solvent resistant flooring. Avoid subsoil penetration.
Store in original container. Keep container tightly closed in a dry and well-ventilated place.

7.2.2 **Store away from:**
Do not store together with oxidizing agents.

7.2.3 **Further Information on Storage Conditions:**
None.

7.3 **Specific end use(s)**
n.av.

SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

Material	Limit Value
Hexamethylene diisocyanate	0,005 ppm
2-Methoxy-1-methylethyl acetate	50 ppm

8.2 **Exposure controls**

8.2.1 **Appropriate engineering controls**
Provide appropriate exhaust ventilation at machinery.

8.2.2 **Individual protection measures**

8.2.2a **Respiratory Protection:** In case of insufficient ventilation wear suitable respiratory equipment.
Respirator with filter A2-P2.

8.2.2b **Hand Protection:** Protective gloves butyl-rubber (0,5 mm) break through time > 8 h
The data about break through time/strength of material are standard values!
The exact break through time/strength of material has to be obtained from the producer of the protective glove.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

8.2.2c **Eye Protection:** Tightly fitting safety goggles

8.2.2d **Skin Protection:** Protective suit

8.2.2e **Further Information:** Observe wearing time limits:

8.2.3 **Environmental exposure controls:**
n.av.

SECTION 9: Physical and chemical properties

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

9.1.1 **Form:** liquid **Colour:** light yellow **Odour:** solvent

Odour threshold: n.av.

9.1.2	pH-value, undiluted:	n.av., pH-value, 1% aqueous solution: n.av.
9.1.3	Boiling point / Boiling - range (°C):	150, Melting point / Melting range (°C): n.av.
9.1.4	Flash point (°C):	54, closed cup
9.1.5	Flammability (EEC A10/A13):	n.ap.
9.1.6	Ignition temperature (°C):	425
9.1.7	Autoflammability (EEC A16):	n.ap.
9.1.8	Oxidising properties:	n.ap.
9.1.9	Explosion hazard:	n.ap.
9.1.10	Explosion limits (Vol.%) lower:	2-Methoxy-1-methylethylacetat: 1,5,
	Explosion limits (Vol.%) upper:	2-Methoxy-1-methylethylacetat : 10,8
9.1.11	Vapour pressure: / Vapour density (Air = 1):	n.av. / n.av.
9.1.12	Density (g/ml):	1,07
9.1.13	Solubility (in Water):	immiscible
9.1.14	Partition coefficient, n-Octanol / Water:	n.av.
9.1.15	Viscosity:	250 mPa*s (23°C)
9.1.16	Solvent content (m %):	10 - 25
9.1.17	Thermal decomposition (°C):	n.av.
9.1.18	Evaporation rate:	n.av.

9.2 **Other information**

n.av.

SECTION 10: Stability and reactivity

10.1 **Reactivity**

No information available.

10.2 **Chemical stability**

No information available.

10.3 **Possibility of hazardous reactions**

Exothermic reaction with amines alcohols.
Humid air and/or water will produce carbon dioxide which will pressurize the container.

10.4 **Conditions to avoid**

Heat, flames and sparks. Keep away from naked flames, hot surfaces and sources of ignition.

10.5 **Incompatible materials**

Amines, alcohols. Humid air and/or water will produce carbon dioxide which will pressurize the container.

10.6 **Hazardous decomposition products**

No decomposition if stored and applied as directed.
To avoid thermal decomposition, do not overheat.

SECTION 11: Toxicological information

11.1 **Information on toxicological effects**

11.1.1 **Substances**

n. ap.

11.1.2 **Mixtures**

Acute Toxicity:

Inhalation:	Hexamethylene diisocyanate homopolymer LC_{50}/inhalation/4h/rat = 0,402 mg / l
Ingestion:	Hexamethylene diisocyanate homopolymer LD_{50}/oral/rat > 5000 mg/ kg
Skin Contact:	Hexamethylene diisocyanate homopolymer LD_{50}/dermal/rat > 5000 mg / kg
Irritation / corrosion (to skin / eye):	May cause eye irritation with susceptible persons.
Sensitisation:	May cause an allergic skin reaction.
Carcinogenicity:	n.av.
Mutagenicity:	Hexamethylene diisocyanate homopolymer Not mutagenic in AMES Test.
Teratogenicity:	n.av.
Narcotic Effects:	n.av.

11.1.3 – **Practical Experience**

11.1.12 n.av.

11.1.13 Practical Experience

Observations relevant for classification:

None.
Further Observations:
Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.
Classification of the preparation has been done by calculation in accordance with EEC directives.

SECTION 12: Ecological information

12.1 **Toxicity**
Hexamethylene diisocyanate homopolymer: Brachydanio rerio LC_0 (96h) > 100 mg/l //
Daphnia magna EC_0 (48h) > 100 mg/l

12.2 **Persistence and degradability**
The product is slightly soluble in water. It can be eliminated from water by abiotic processes.
Not readily biodegradable (1 % after 28 days).

12.3 **Bioaccumulative potential**
n.av.

12.4 **Mobility in soil**
n.av.

12.5 **Results of PBT and vPvB assessment**
n.av.

12.6 **Other adverse effects**

12.6.1	COD-Value, mg/g:	n.av.
12.6.2	BOD5-Value, mg/g:	n.av.
12.6.3	AOX-Remarks:	n.av.
12.6.4	Significant Components:	None.
12.6.5	Other adverse effects:	n.av.

SECTION 13: Disposal considerations

13.1 **Waste treatment methods**
13.1.1 Recommendation: D 10 / R1

Waste - Code - No.:
The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

In addition comply with the regional authorities.

13.2 **Contaminated Packaging**
13.2.1 Recommendation: Wash with suitable cleaner. Otherwise as described under Residues.
13.2.2 Safe Handling: As described under Residues.

SECTION 14: Transport information

ADR	IMDG	IATA

14.1	**UN number**		
	1263	1263	1263
14.2	**UN proper shipping name**		
	UN 1263 Farbe	Farbe	Paint
14.3	**Transport hazard class(es)**		
	3 	3 	3 
14.4	**Packing group**		
	III	III	III
14.5	**Environmental hazards**		
		No.	
14.6	**Special precautions for user**		
	Transport category: 3 Classification Code: F1 Hazard - No.: 30 LQ: 5 L	F-E, S-E	Packing Instructions (Passenger) 355 Packing Instructions (Cargo) 366
14.7	**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**		
		n.av.	

SECTION 15: Regulatory information

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

15.2 **Chemical safety assessment :**
A chemical safety assessment has not been carried out.

SECTION 16: Other information

Text of R / H phrases mentioned in Section 3
R 10: Flammable.
R 20: Harmful by inhalation.
R 23: Toxic by inhalation.
R 36/37/38: Irritating to eyes, respiratory system and skin.
R 37: Irritating to respiratory system.
R 42/43: May cause sensitization by inhalation and by skin contact.
R 43: May cause sensitization by skin contact.
H226: Flammable liquid and vapour.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H331: Toxic if inhaled.
H332: Harmful if inhaled.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.
This datasheet has been compiled in accordance with EU regulation 453/201.
The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.