



SAFETY DATA SHEET
P21MC2376516 ORION HBPU

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name P21MC2376516 ORION HBPU
Product No. 301/0041

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

Identified uses Industrial Coating for Professional Use Only

1.3. Details of the supplier of the safety data sheet

Supplier Beckers Industrial Coatings Ltd
Goodlass Road
Speke
Liverpool
L24 9HJ
Tel 0151 448 1010
Fax 0151 448 2589
she@beckers-group.com

1.4. Emergency telephone number

0151 448 1010 , Monday to Thursday 08.30 - 16.45 and Friday 8.30 - 15.45

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Carc. Cat. 3;R40. R43. N;R51/53. R10, R66, R67.

Human health

Known or suspected carcinogen for humans. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Vapours/aerosol spray may irritate the respiratory system. Repeated exposure may cause skin dryness or cracking

Environment

The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See section 12.

Physical and Chemical Hazards

The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

2.2. Label elements

Contains 1,6-diisocyanatohexane Homopolymer, Methyl ethyl ketone oxim-blocked
HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE

Labelling



Harmful



Dangerous for the environment

Risk Phrases

R10	Flammable.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

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BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE		< 1%
CAS-No.: 41556-26-7	EC No.: 255-437-1	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) N;R50/53. R43.	
BUTANOL-norm		< 1%
CAS-No.: 71-36-3	EC No.: 200-751-6	Registration Number: 01-2119484630-38-XXXX
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335 STOT SE 3 - H336	Classification (67/548/EEC) R10 Xn;R22 Xi;R37/38,R41 R67	
BUTYL ACETATE -norm		< 1%
CAS-No.: 123-86-4	EC No.: 204-658-1	Registration Number: 01-2119485493-29
Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 STOT SE 3 - H336	Classification (67/548/EEC) R10 R66 R67	
EPOXY RESIN (Number average MW <= 700)		< 1%
CAS-No.: 25068-38-6	EC No.: 500-033-5	Registration Number: 01-2119456619-26
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	Classification (67/548/EEC) R43 Xi;R36/38 N;R51/53	
ETHYL ACRYLATE		< 1%
CAS-No.: 140-88-5	EC No.: 205-438-8	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H335	Classification (67/548/EEC) F;R11 Xn;R20/21/22 R43 Xi;R36/37/38	

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FORMALDEHYDE ...%		< 1%
CAS-No.: 50-00-0	EC No.: 200-001-8	
Classification (EC 1272/2008) Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335	Classification (67/548/EEC) Carc. Cat. 3;R40 T;R23/24/25 C;R34 R43	
HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE		10-30%
CAS-No.: 64742-94-5	EC No.: 265-198-5	Registration Number: 01-2119463588-24
Classification (EC 1272/2008) EUH066 Carc. 2 - H351 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. Carc. Cat. 3;R40. N;R51/53. R66,R67.	
METHANOL		< 1%
CAS-No.: 67-56-1	EC No.: 200-659-6	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370	Classification (67/548/EEC) F;R11 T;R23/24/25,R39/23/24/25	
METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL SEBACATE		< 1%
CAS-No.: 82919-37-7	EC No.: 280-060-4	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) N;R50/53. R43.	
PROPAN-2-OL		1-5%
CAS-No.: 67-63-0	EC No.: 200-661-7	Registration Number: 01-2119457558-25-XXXX
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC) F;R11 Xi;R36 R67	

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SOLVENT NAPHTA 100		1-5%
CAS-No.: 64742-95-6	EC No.: 265-199-0	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xn;R65. Xi;R37. N;R51/53. R10,R66,R67.	
SOLVENT NAPHTHA (PETROLEUM) HEAVY AROM		5-10%
CAS-No.: 64742-94-5	EC No.: 265-198-5	Registration Number: 01-2119463588-24-0000
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xn;R65. N;R51/53. R66,R67.	
XYLENE		< 1%
CAS-No.: 1330-20-7	EC No.: 215-535-7	Registration Number: 01-2119488216-32-0000
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315	Classification (67/548/EEC) R10 Xn;R20/21 Xi;R38	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

The Data shown is in accordance with the Dangerous Preparations Directive (1999/45/EC) and the Safety Data Sheet compiled in accordance with (91/155) as amended

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious. Get medical attention if any discomfort continues.

Inhalation

Place unconscious person on the side in the recovery position and ensure breathing can take place. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

Skin contact

Use appropriate hand lotion to prevent defatting and cracking of skin. Immediately remove contaminated clothing. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing.

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

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

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

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Extinguishing media

Fire can be extinguished using: Water spray, fog or mist. Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Fire causes formation of toxic gases.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Use pressurised air mask if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame.

Avoid spilling, skin and eye contact.

Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

Vapours are heavier than air and may spread near ground to sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Avoid contact with oxidising agents.

Storage Class

Flammable liquid storage.

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
2-BUTOXYETHANOL	WEL	25 ppm(Sk)		50 ppm(Sk)		
2-METHOXY-1-METHYLETHYL ACETATE	WEL	50 ppm(Sk)	274 mg/m3(Sk)	100 ppm(Sk)	548 mg/m3(Sk)	
BUTANOL-norm	WEL			50 ppm(Sk)	154 mg/m3(Sk)	
BUTYL ACETATE -norm	WEL	150 ppm	724 mg/m3	200 ppm	966 mg/m3	
ETHYL ACRYLATE		5	21	10	42	
FORMALDEHYDE ...%	WEL	2 ppm	2.5 mg/m3	2 ppm	2.5 mg/m3	
METHANOL	WEL	200 ppm(Sk)	266 mg/m3(Sk)	250 ppm(Sk)	333 mg/m3(Sk)	
PROPAN-2-OL	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3	
XYLENE	WEL	50 ppm(Sk)	220 mg/m3(Sk)	100 ppm(Sk)	441 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits Due to the hazardous nature of ingredients, exposure should be minimal.

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

Respiratory equipment

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Wear mask supplied with: Gas cartridge suitable for organic substances.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Neoprene. Nitrile. Rubber (natural, latex).

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Solubility	Slightly soluble in water.
Vapour density (air=1)	Heavier than air
Flash point	< 55 CC (Closed cup).
Flammability Limit - Lower(%)	0.8

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

No particular stability concerns.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Other Health Effects
Carcinogen Category 3.

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation

In high concentrations, vapours may irritate throat and respiratory system and cause coughing. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Gas or vapour is harmful on prolonged exposure or in high concentrations.

Ingestion

Gastrointestinal symptoms, including upset stomach. Contains components which have cumulative effects.

Skin contact

Prolonged or repeated exposure may cause severe irritation. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

Eye contact

Irritation of eyes and mucous membranes.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding (explosion risk). Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263

14.2. UN proper shipping name

Proper Shipping Name PAINT or PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.

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ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3
Transport Labels	



14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS	F-E, S-D
Emergency Action Code	3Y
Hazard No. (ADR)	33

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

SECTION 15: REGULATORY INFORMATION

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

EU Legislation

System of specific information relating to Dangerous Preparations. 2001/58/EC. Dangerous Preparations Directive 1999/45/EC.

National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Workplace Exposure Limits 2005 (EH40)

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

Revision Date	17/06/2013
Revision	20
Supersedes date	12/06/2013

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Risk Phrases In Full

R34	Causes burns.
R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R22	Harmful if swallowed.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R36/38	Irritating to eyes and skin.
R36/37/38	Irritating to eyes, respiratory system and skin.
R36	Irritating to eyes.
R37/38	Irritating to respiratory system and skin.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R66	Repeated exposure may cause skin dryness or cracking.
R41	Risk of serious damage to eyes.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R67	Vapours may cause drowsiness and dizziness.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H370	Causes damage to organs <<Organs>>.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H336	May cause drowsiness or dizziness.
H335	May cause respiratory irritation.
EUH066	Repeated exposure may cause skin dryness or cracking.
H351	Suspected of causing cancer.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in a process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.