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

1.1 Product identifier

Trade name/designation OP-Coat 100 N Part B

Art-Nr. EP-C-B-100-N

Unique Formula Identifier UFI: U14S-R7X9-390H-EK2A

Hazard components
3-aminomethyl-3,5,5-trimethylcyclohexylamine, Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled

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

Use of the substance/mixture
Hardener

1.3 Details of the supplier of the safety data sheet

Supplier
H2N TRADING GmbH
Bgm.-Bombeck-Str. 1
D-22851 Norderstedt
Telephone +49 (0)40 308 598 51
Telefax +49 (0)40 308 598 53
E-mail info@h2n-trading.de
Website www.h2n-trading.de

Department responsible for information:
Telephone +49 (0)40 308 598 51

1.4 Emergency telephone number

Giftinformationszentrale Göttingen GIZ-Nord	+49(0)551/ 19 240
	24/7
H2N TRADING GmbH	+49 (0)40 308 598 51
	Only available during office hours: Monday to Friday from 9.00 am to 5.00 pm.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification procedure
Acute Tox. 4, H302	
Acute Tox. 4, H312	
Skin Corr. 1B, H314	
Eye Dam. 1, H318	
Skin Sens. 1, H317	

Hazard statements for health hazards
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

Remark
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard components
3-aminomethyl-3,5,5-trimethylcyclohexylamine, Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled

Hazard pictograms


GHS05


GHS07

Signal word
Danger

Hazard statements
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.

Precautionary statements
P102 Keep out of reach of children.
P280 Wear protective gloves/protective clothing and eye protection/face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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.
P315 Get immediate medical advice/attention.
P501 Dispose of contents/container to a licensed disposal company.

Special rules on packaging
Tactile warning according to EN/ISO 11683.
Child-resistant fastenings (EN/862/ISO 8317).

2.3 Other hazards

Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Hazardous ingredients

CAS No	EC No	Index No	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
2855-13-2	220-666-8	612-067-00-9	3-aminomethyl-3,5,5-trimethylcyclohexylamine	> 40 < 60 weight-%	Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Skin Corr. 1B; H314 Skin Sens. 1A; H317 Aquatic Chronic 3; H412	Skin Sens. 1A;H317: C >= 0,001% ATE(oral): 1030 mg/kg ATE(dermal): 1840 mg/kg

CAS No	EC No	Index No	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
8007-24-7	700-991-6		Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled	> 30 < 50 weight-%	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317	ATE(oral): > 2000 mg/kg ATE(dermal): 2000 mg/kg
90-72-2	202-013-9	603-069-00-0	2,4,6-tris(dimethylaminomethyl)phenol	> 5 < 15 weight-%	Acute Tox. 4 ; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315	ATE(oral): 2169 mg/kg

REACH No.	Substance name
01-2119514687-32-XXXX	3-aminomethyl-3,5,5-trimethylcyclohexylamine
01-2119502450-57-XXXX	Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled
01-2119560597-27-XXXX	2,4,6-tris(dimethylaminomethyl)phenol

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Remove contaminated, saturated clothing immediately.

Following inhalation
Provide fresh air.

Following skin contact
After contact with skin, wash immediately with plenty of water and soap.
In case of skin reactions, consult a physician.

After eye contact
Rinse immediately carefully and thoroughly with eye-bath or water.
Remove contact lenses.
Get medical advice/attention immediately.

Following ingestion
Do NOT induce vomiting.
Rinse mouth immediately and drink plenty of water.
Get medical advice/attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water
Dry extinguishing powder
Carbon dioxide (CO2)
alcohol resistant foam

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
In the case of thermal decomposition formation of dangerous gases possible.

5.3 Advice for firefighters

Special protective equipment for firefighters
In case of fire: Wear self-contained breathing apparatus.
Chemical protection suit

Additional information
Use water spray jet to protect personnel and to cool endangered containers.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Ensure adequate ventilation / exhaustion at the workplace.
Keep people away and stay on the upwind side.
Avoid skin and eye contact.
Use personal protection equipment.
Do not breathe gas / fumes / vapor / spray.
Use breathing apparatus if exposed to vapors / spray.

6.2 Environmental precautions

Do not seep away runed out product into ground or body of water.
Do not allow to enter into surface water or drains.
If the product contaminates soil, waterways or drains inform the corresponding authorities.

6.3 Methods and material for containment and cleaning up

For containment
Ensure adequate ventilation.
Stam and take up with absorbent material (e.g. sand, soil, vermiculite).
Send in suitable containers for recovery or disposal.
After taking up the material dispose according to regulation.

6.4 Reference to other sections

Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8
Emergency telephone number: see section 1

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures
Keep container tightly closed.
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
Do not inhale polishing dust.
Protect from heat and direct sunlight.
Keep in a cool, well-ventilated place.
Avoid:
Eye contact
Skin contact
Do not inhale gases/vapours/aerosols.

Advices on general occupational hygiene
Thorough skin-cleansing after handling the product.
Apply skin care products after work.
When using do not eat, drink, smoke, sniff.
Remove contaminated, saturated clothing immediately.
Work in rooms with good ventilation.
Wash hands before breaks and after work.
Use protective skin cream before handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep/Store only in original container.
Keep container tightly closed.

Further information on storage conditions
Store and transport separate of food.
Protect from frost.
Protect from heat and direct solar radiation.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DNEL worker

CAS No	Substance name	DNEL value	DNEL type	Remark
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	20.1 mg/m³	acute inhalative (local)	
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	20.1 mg/m³	acute inhalative (systemic)	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	0.31 mg/m³	long-term inhalative (systemic)	

DNEL Consumer

CAS No	Substance name	DNEL value	DNEL type	Remark
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	5 mg/kg bw/day	Long-term – oral, systemic effects	

PNEC

CAS No	Substance name	PNEC Value	PNEC type	Remark
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	0.06 mg/L	aquatic, freshwater	
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	0.23 mg/L	aquatic, intermittent release	
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	0.006 mg/L	aquatic, marine water	
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	5.784 mg/kg	sediment, freshwater	
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	0.578 mg/kg	sediment, marine water	
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	3.18 mg/L	sewage treatment plant (STP)	

CAS No	Substance name	PNEC Value	PNEC type	Remark
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	1.121 mg/kg	soil	
8007-24-7	Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled	3 µg/L	aquatic, freshwater	
8007-24-7	Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled	30 µg/L	aquatic, intermittent release	
8007-24-7	Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled	10 mg/kg	Secondary Poisoning	
8007-24-7	Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled	0.97 mg/kg	sediment, freshwater	
8007-24-7	Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled	0.088 mg/kg	sediment, marine water	
8007-24-7	Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled	6.71 mg/kg	soil	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	0.084 mg/L	aquatic, freshwater	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	0.0084 mg/L	aquatic, marine water	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	0.2 mg/L	sewage treatment plant (STP)	

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposure

Ensure good ventilation, where necessary use fume hood.

Personal protection equipment

Eye/face protection

safety goggles

Hand protection

The selection of the suitable gloves does not only depend on different material, but also on further marks of quality and varies from manufacturer to manufacturer.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.
Since the product is a preparation of several substances, the resistance of glove materials is only conditionally predictable and must therefore be checked before use.
The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Body protection:

Impermeable protective clothing

Respiratory protection

Short term: filter device, filter AX/P2, otherwise: self-contained breathing apparatus.
Breathing apparatus if sanding dust occurs.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state
liquid

Colour
transparent
yellow

Odour
amine-like

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:	not determined		
Melting point/freezing point	not determined		
Boiling point or initial boiling point and boiling range	> 150 °C		
flammability	not determined		
Lower and upper explosion limit	not determined		
Flash point	> 110 °C		
Auto-ignition temperature	not determined		
Decomposition temperature	not determined		
pH	9		
Viscosity	dynamic 70 mPa*s (25°C)		
Solubility(ies)	not determined		
Partition coefficient n-octanol/water (log value)	not determined		
Vapour pressure	not determined		
Density and/or relative density	0.93 g/cm³ (25°C)		
Relative vapour density	not determined		
particle characteristics	not determined		

9.2 Other information

Other information
see technical data sheet

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

Exothermic reaction with acids.

10.4 Conditions to avoid

Protect from frost, heat and direct sunlight.

10.5 Incompatible materials

Acid
Oxidising agent

10.6 Hazardous decomposition products

Concerning possible decomposition products see section 5.

Additional information

As a general rule we recommend avoiding the contact with strong chemical reagents, such as acids, bases, reductors and oxidizers.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Animal data

	Effective dose	Method,Evaluation	Source, Remark
Acute oral toxicity	CAS No90-72-2 2,4,6-tris(dimethylaminomethyl)phenol LD50: 2169 mg/kg Species Rat	OECD 401	
	CAS No8007-24-7 Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled LD50: > 2000 mg/kg Species Rat		
	CAS No2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine LD50: 1030 mg/kg Species Rat		
Acute dermal toxicity	CAS No8007-24-7 Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled LD50: 2000 mg/kg Species Rat		
	CAS No2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine LC50: 1840 mg/kg Species Rabbit		
Acute inhalation toxicity	not determined		

Assessment/classification
Harmful in contact with skin and if swallowed.

Skin corrosion/irritation

Assessment/classification
Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment/classification
Causes serious eye damage.

Sensitisation to the respiratory tract

Assessment/classification
No known sensitization.

Skin sensitisation

Assessment/classification
May cause an allergic skin reaction.

Germ cell mutagenicity

not determined

Carcinogenicity

not determined

Reproductive toxicity

not determined

STOT-single exposure

STOT SE 1 and 2

Other information
No effects known.

STOT SE 3

Irritation to respiratory tract

Other information
No effect known.

Narcotic effects

Assessment/classification
Not classified

STOT-repeated exposure

Other information
No effects known.

Aspiration hazard

Remark
No classification in terms of aspiration.

11.2 Information on other hazards

Information on other hazards

	Effective dose	Method,Evaluation	Source, Remark
Endocrine disrupting properties		Based on available data, the classification criteria are not met.	

Other information

The product should be handled with the care usual when dealing with chemicals.
Further hazardous properties can not be excluded.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

	Effective dose	Method,Evaluation	Source, Remark
Acute (short-term) fish toxicity	CAS No2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine LC50: 110 mg/L Species Leuciscus idus (golden orfe) Test duration 96 h CAS No90-72-2 2,4,6-tris(dimethylaminomethyl)phenol LC50: 175 mg/L Species Cyprinus carpio (Common Carp) Test duration 96 h		
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustacea	CAS No2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine EC50 23 mg/L Species Daphnia magna (Big water flea) Test duration 48 h	OECD 202	
Chronic (long-term) toxicity to aquatic invertebrate	not determined		
Acute (short-term) toxicity to algae and cyanobacteria	CAS No2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine ErC50: > 50 mg/L Species Scenedesmus subspicatus Test duration 72 h CAS No90-72-2 2,4,6-tris(dimethylaminomethyl)phenol EC50 84 mg/L Species Desmodesmus subspicatus Test duration 72 h	Richtlinie 88/302/EWG, Teil C, S. 89	
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	not determined		
Toxicity to other aquatic plants/organisms	not determined		

	Effective dose	Method,Evaluation	Source, Remark
Toxicity to microorganisms	CAS No2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine EC10 1120 mg/L Species Pseudomonas putida Test duration 18 h		

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

	Effective dose	Method,Evaluation	Source, Remark
Endocrine disrupting properties		Based on available data, the classification criteria are not met.	

12.7 Other adverse effects

Additional ecotoxicological information

Additional information

Ecological data for the mixture are not available.
Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste codes/waste designations according to EWC/AVV

Waste code product	Waste name
200127 *	paint, inks, adhesives and resins containing hazardous substances

Waste code packaging	Waste name
150102	plastic packaging
150104	metallic packaging

Appropriate disposal / Product

The waste code number mentioned is only intended as a recommendation.
The used product may have different properties than the unused one. This safety data sheet cannot provide any information on the used product.
Dispose of waste according to applicable legislation.
Dispose of waste according to "Kreislaufwirtschaftsgesetz (KrWG)".
This means that a distinction must be made between "wastes for recycling" and "wastes for disposal". Particular aspects - in the main concerning delivery - are also governed by the German federal states.

Appropriate disposal / Package

Disposal in accordance with local regulations.

Remark
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	UN 1760	UN 1760	UN 1760
14.2 UN proper shipping name	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)	Corrosive liquid, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3 Transport hazard class(es)	8	8	8
14.4 Packing group	III	III	III
14.5 Environmental hazards	No	No	No

14.6 Special precautions for user

No data available

14.7 Maritime transport in bulk according to IMO instruments

No data available

Land transport (ADR/RID)

UN number or ID number	UN 1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
Transport hazard class(es)	8
Hazard label(s)	8
Classification code	C9
Packing group	III
Environmental hazards	No
Limited quantity (LQ)	5 L
Special provisions	274
Tunnel restriction code	E

Sea transport (IMDG)

UN number or ID number	UN 1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
Transport hazard class(es)	8
Packing group	III
Environmental hazards	No
Limited quantity (LQ)	5 L
Marine pollutant	No
EmS	F-A, S-B

Air transport (ICAO-TI / IATA-DGR)

UN number or ID number	UN 1760
UN proper shipping name	Corrosive liquid, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
Transport hazard class(es)	8
Packing group	III
Environmental hazards	No

SECTION 15: Regulatory information

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

No data available

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other information

Indication of changes
* Data changed compared with the previous version

Abbreviations and acronyms
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).
CAS: Chemical Abstracts Service
CLP: Classification, Labelling and Packaging
ECHA: European Chemicals Agency
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
REACH: Registration, Evaluation and Authorization of Chemicals
PNEC: Predicted No Effect Concentration
SCL: Specific concentration limit
STOT: Specific Target Organ Toxicity
DNEL: derived no-effect level
EC50: Effective Concentration 50%
IC50: Inhibition Concentration 50 %
LC50: Lethal (fatal) Concentration 50%
LD50: Lethal (fatal) Dose 50%
SVHC: Substance of Very High Concern
PBT: persistent and bioaccumulative and toxic
vPvB: very persistent, very bioaccumulative
WGK: water hazard class
See overview table at www.euphrac.eu
Acute Tox. 4, H302: Acute Toxicity (oral), Category 4
Acute Tox. 4, H312: Acute toxicity (dermal), Category 4
Skin Corr. 1B: Skin corrosion, Sub-category 1B
Skin Irrit. 2: Skin irritation, Category 2
Eye Dam. 1: Serious eye damage, Category 1
Eye Irrit. 2: Eye irritation, Category 2
Skin Sens. 1: Skin sensitizer, Category 1
Skin Sens. 1A: Skin sensitizer, Sub-category 1A
Aquatic Chronic 3: Long-term (chronic) aquatic hazard, Category 3

Key literature references and sources for data
Data sheets of the sub-supplier.
European Chemicals Agency (ECHA)
Full text of Hazard Statements in Section 3 (NOT classification of the mixture).
IFA, GESTIS International Limit Values Database

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
The classification of the mixture was carried out following the calculation method according to the CLP Regulation (1272/2008).

Training advice
See technical data sheet for more information.

Additional information
National and local regulations concerning chemicals shall be observed.
The national special regulations must be implemented by each user on his own responsibility!
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
Please observe the following disclaimer! Our safety data sheets have been compiled according to effective EU directives, WITHOUT taking into account the special national directives concerning the handling of hazardous substances.

Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.