



Safety Data Sheet

prepared to UN GHS Revision 3

1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier	121ACT	Revision Date:	18/08/2023
Product Name:	Dural 121	Supersedes Date:	New SDS
1.2 Relevant identified uses of the substance or mixture and uses advised against	Hardener of 2 component adhesive. Advised against: others than recommended		
1.3 Details of the supplier of the safety data sheet			
Importer:	Importer		
Manufacturer:	StonCor Africa (Pty.) Ltd. 8 Cresset Road Midrand Industrial Park, Chloorkop P.O. Box 2205 2001, Johannesburg South Africa		
	Regulatory / Technical Information: +27 11 254 5500		
Datasheet Produced by:	Chettiar, Serisha - ehs@stoncor.com		
1.4 Emergency telephone number:	CHEMTREC 1-800-424-9300 (Inside US) CHEMTREC +1 703 5273887 (Outside US) Giftinformasjonen: +47 22 59 13 00		

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Dermal, category 4
 Hazardous to the aquatic environment, Chronic, category 2
 Skin Corrosion, category 1
 Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

Triethylenetetramine, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine, polymer of c-18 unsat'd fatty

HAZARD STATEMENTS

Acute Toxicity, Dermal, category 4	H312	Harmful in contact with skin.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P352	Wash with plenty of soap and water.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous ingredients

<u>Name According to EEC</u>	<u>EINEC No.</u>	<u>CAS-No.</u>	<u>%</u>	<u>Classifications</u>	
polymer of c-18 unsat'd fatty	500-191-5	68082-29-1	50 - <75	H315-318-411	Aquatic Chronic 2, Eye Dam. 1, Skin Irrit. 2

Triethylenetetramine	203-950-6	112-24-3	2.5 - <10	H311-314-317-412	Acute Tox. 3 Dermal, Aquatic Chronic 3, Skin Corr. 1, Skin Sens. 1
2,4,6-tris (dimethylaminomethyl) phenol	202-013-9	90-72-2	2.5 - <10	H315-319	Eye Irrit. 2, Skin Irrit. 2
formaldehyde polymer with phen	500-037-7	25265-17-2	2.5 - <10		
silica, crystalline free	601-216-3	112945-52-5	2.5 - <10		
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	220-666-8	2855-13-2	1.0 - <2.5	H302-314-317	Acute Tox. 4 Oral, Skin Corr. 1B, Skin Sens. 1A
Phenol	203-632-7	108-95-2	0.1 - <1.0	H302-311-314-331-341-373	Acute Tox. 3 Dermal, Acute Tox. 3 Inhalation, Acute Tox. 4 Oral, Muta. 2, Skin Corr. 1, STOT RE 2

<u>CAS-No.</u>	<u>M-Factors</u>
68082-29-1	0
112-24-3	0
90-72-2	0
25265-17-2	0
112945-52-5	0
2855-13-2	0
108-95-2	0

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice.

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.

AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

No Information

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. High volume water jet. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Contains epoxy constituents. See information supplied by the manufacturer.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. May cause long-term adverse effects in the aquatic environment.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING: Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment.

PROTECTION AND HYGIENE MEASURES: Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: No Information

STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits
(EU)

Name	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
polymer of c-18 unsat'd fatty	68082-29-1				

Triethylenetetramine	112-24-3				
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2				
formaldehyde polymer with phen	25265-17-2				
silica, crystalline free	112945-52-5				
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2				
Phenol	108-95-2	2	4	16	8

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
polymer of c-18 unsat'd fatty	68082-29-1	
Triethylenetetramine	112-24-3	
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	
formaldehyde polymer with phen	25265-17-2	
silica, crystalline free	112945-52-5	
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	
Phenol	108-95-2	SKIN

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with a vapor filter.

EYE PROTECTION: Safety glasses.

HAND PROTECTION: Impervious gloves. Long sleeved clothing. Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Clear/amber Paste
Physical State	Paste
Odor	Amine Like
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	156 - 300
Flash Point, (°C)	93
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive	

limits	Not determined
Vapour Pressure	Not determined
Vapour density	Not determined
Relative density	~1
Solubility in / Miscibility with water	Slightly Soluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidising properties	Not determined
9.2 Other information	
VOC Content g/l:	Not determined
Calculated grams of VOC per liter of coating product as applied.	
Specific Gravity (g/cm ³)	0.984

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

No Information

10.5 Incompatible materials

Strong oxidizing agents. Acids and bases. Amines.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours. Alcohols. Exothermic reaction. Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No information

Inhalation LC50: No information

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
68082-29-1	polymer of c-18 unsat'd fatty	2001 mg/kg oral, rat			0.000	0.000
112-24-3	Triethylenetetramine	2500 mg/kg rat, oral	805 mg/kg		0.000	0.000
90-72-2	2,4,6-tris(dimethylaminomethyl) phenol	2169 mg/kg oral			0.000	0.000
112945-52-5	silica, crystalline free	10000 mg/kg, oral, rat			0.000	0.000
2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	500 mg/kg oral			0.000	0.000
108-95-2	Phenol	317 mg/kg oral		316 mg/m3 inhalation	0.000	0.000

Additional Information:

This product may contain Quartz (silicon dioxide), which is listed by IARC as a known carcinogenic to humans (Group 1). This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

12. Ecological Information

- 12.1 **Toxicity:**
- | | |
|----------------------|----------------|
| EC50 48hr (Daphnia): | No information |
| IC50 72hr (Algae): | No information |
| LC50 96hr (fish): | No information |
- 12.2 **Persistence and degradability:** No information
- 12.3 **Bioaccumulative potential:** No information
- 12.4 **Mobility in soil:** No information
- 12.5 **Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.
- 12.6 **Other adverse effects:** No information

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
68082-29-1	polymer of c-18 unsat'd fatty	No information	No information	
112-24-3	Triethylenetetramine	No information	No information	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	No information	No information	
25265-17-2	formaldehyde polymer with phen	No information	No information	
112945-52-5	silica, crystalline free	No information	No information	
2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	No information	No information	
108-95-2	Phenol	No information	No information	

13. Disposal Considerations

- 13.1 **WASTE TREATMENT METHODS:** If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

- | | |
|---|----------------------------------|
| 14.1 UN number | UN 2735 |
| 14.2 UN proper shipping name | Amines, Liquid, Corrosive, N.O.S |
| Technical name | Not applicable |
| 14.3 Transport hazard class(es) | 8 |
| Subsidiary shipping hazard | Not applicable |
| 14.4 Packing group | PG II |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | Not applicable |
| EmS-No.: | Not applicable |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code | Not applicable |

15. Regulatory Information

- 15.1 **Safety, health and environmental regulations/legislation for the substance or mixture:**

National Regulations:

Denmark Product Registration Number:	Not available
Danish MAL Code:	Not available
Danish MAL Code - Mixture:	Not available
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
WGK Class:	Not available

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H302	Harmful if swallowed.
H311	Toxic 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.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
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.

Reasons for revision

No Information

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

Acronym & Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m ³	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects
IMO	International Maritime Organization
Note P:	The classification as a carcinogen or mutagen need not apply; the substance contains less than 0,1 % w/w benzene
Note 10:	The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.