Safety Data Sheet according to Regulation (EC) No. 453/2010

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

1.1 Product Identifier

Product Name: Stonchem 600 Series Broadcast Amine

6114A

Revision Date: 02/06/2015

Supercedes Date: 29/05/2015

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

Component of multicomponent industrial coatings - Industrial use.

1.3 Details of the supplier of the safety data sheet

Importer:

StonCor Europe
9 Rue du Travail, 1400 Nivelles, Belgium

Manufacturer:

Stonhard, Division of StonCor Group, Inc.
1000 East Park Avenue
Maple Shade, NJ 08052

+1 856 7797500 (US)

Regulatory / Technical Information:
+32 67493710 Nivelles, Belgium
+39 02253751 Cologno Monzese, Italy

Datasheet Produced by: Darnell, Benjamin - ehs@stoncor.com

1.4 Emergency telephone number: CHEMTREC +1 703 5273887 (Outside US)

2. Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

Reproductive Toxicity, category 2	H361
STOT, single exposure, category 3, RTI	H335
Skin Corrosion, category 1	H314-1
Skin Sensitizer, category 1	H317
Acute Toxicity, Inhalation, category 1	H330-1

Hazardous to the aquatic environment, Chronic, category 3	H412

2.2 Label elements

Symbol(s) of Product

Signal Word

Danger

Named Chemicals on Label

4,4'-isopropylidenediphenol, benzyl alcohol, diethylenetriamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine

HAZARD STATEMENTS

Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 1	H330-1	Fatal if inhaled.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful 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.
P284	Wear respiratory protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

Not applicable

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

CAS-No.	EINEC No.	Name According to EEC	%
111-40-0	203-865-4	diethylenetriamine	25-50
80-05-7	201-245-8	4,4'-isopropylidenediphenol	10-25
100-51-6	202-859-9	benzyl alcohol	2.5-10

2855-13-2	220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine	2.5-10
68609-08-5	614-657-1	cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	1.0-2.5

CAS-No.	REACH Reg No.	CLP Symbols	CLP Hazard Statements	M-Factors
111-40-0		GHS05-GHS06	H302-312-314-317-330-335	
80-05-7	01-2119457856-23-0043	GHS05-GHS07-GHS08-GHS09	H317-318-335-361-411	
100-51-6		GHS07	H302-319-332	
2855-13-2	01-2119514687-32-0002	GHS05-GHS07	H302-314-317-412	
68609-08-5		GHS09	H411	

Additional Information: The text for CLP 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.
AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.
AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. 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

Causes severe burns. Harmful in contact with skin and if swallowed. Irritating to eyes and respiratory system.

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.

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.

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

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist.
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: Direct sources of heat.
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
(IR)

Name	%	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3	OEL Note
diethylenetriamine	25-50	1			4	Can be absorbed through the skin.
4,4'-isopropylidenediphenol	10-25				10	
benzyl alcohol	2.5-10					
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2.5-10					
cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	1.0-2.5					

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified at the EU level under the dangerous substances and preparations regulation.

8.2 Exposure controls

Personal Protection
RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required. Respirator with filter for organic vapor.
EYE PROTECTION: Safety glasses.
HAND PROTECTION: Rubber or plastic gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Rubber or plastic apron.
OTHER PROTECTIVE EQUIPMENT: No Information
ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

Chemical Name:

diethylenetriamine

EC No.: 203-865-4

CAS-No.: 111-40-0

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation	2.6 mg/m3	92.1 mg/m3	1.1 mg/cm2	15.4 mg/m3		27.5 mg/m3		4.6 mg/m3
Dermal				11.4 mg/kg bw/ day		4.88 mg/kg bw/day		4.88 mg/kg bw/ day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.56 mg/l
Fresh water sediments	1072 mg/kg dwt
Marine water	0.056 mg/l
Marine sediments	107.2 mg/kg dwt
Food chain	
Microorganisms in sewage treatment	6 mg/l
soil (agricultural)	214 mg/kg dwt
Air	

Chemical Name:

3-aminomethyl-3,5,5-trimethylcyclohexylamine

EC No.: 220-666-8

CAS-No.: 2855-13-2

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							0.526 mg/kg bw/ day
Inhalation								
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.06 mg/l
Fresh water sediments	5.784 mg/kg
Marine water	0.006 mg/l
Marine sediments	0.578 mg/kg
Food chain	
Microorganisms in sewage treatment	3.18 mg/l
soil (agricultural)	1.121 mg/kg
Air	

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Amber / Clear Liquid

Physical State Liquid

Odor Ammonia like

Odor threshold Not determined

pH	N/A
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	101 - N.D.
Flash Point, (°C)	95
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	N/A - N/A
Vapour Pressure	Not determined
Vapour density	Not determined
Relative density	Not determined
Solubility in / Miscibility with water	Negligible
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: 20

Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

Specific Gravity (g/cm3)	1.052

10. Stability and Reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous polymerisation may occur.

10.4 Conditions to avoid
Direct sources of heat.

10.5 Incompatible materials
Strong oxidizing agents.

10.6 Hazardous decomposition products
Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50:

Inhalation LC50:

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:

CAS-No.	Name According to EEC	Oral LD50	Dermal LD50	Vapor LC50
111-40-0	diethylenetriamine	1080 mg/kg, oral, rat	1090 mg/kg	10 mg/L / 1 hour, inh, rat
80-05-7	4,4'-isopropylidenediphenol	5000 mg/kg, oral, rat	3000 mg/kg, oral, rabbit	
100-51-6	benzyl alcohol	1620 mg/kg Rat Oral		>4178 mg/m3 Rat Inhalation
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	1030 mg/kg, rat	>2000 mg/kg, rat	

Additional Information:
No Information

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

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
111-40-0	diethylenetriamine	780 mg/l	No information	430 mg/l
80-05-7	4,4'-isopropylidenediphenol	10.2 mg/l	No information	205 mg/l

100-51-6	benzyl alcohol	230 mg/l	700 mg/l	460 mg/l
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	No information	>50 mg/l	110 mg/l
68609-08-5	cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	No information	No information	

Further Ecological Information

Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

CAS-No.	Name According to EEC
80-05-7	4,4'-isopropylidenediphenol
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine

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.

European Waste Code: 080111
Packaging Waste Code: 150110

14. Transport Information

14.1	**UN number**	UN2735
14.2	**UN proper shipping name**	Amines, Liquid, Corrosive, N.O.S.
	Technical name	(DIETHYLENETRIAMINE, MODIFIED ALIPHATIC AMINE REQUIRED)
14.3	**Transport hazard class(es)**	8
	Subsidiary shipping hazard	
14.4	**Packing group**	II
14.5	**Environmental hazards**	
14.6	**Special precautions for user**	Not applicable
	EmS-No.:	N/A
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:

Danish MAL Code:

Sweden Product Registration Number:

Norway Product Registration Number:

WGK Class:

Chemical Safety Assessment:

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

16. Other Information

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

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.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
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
ESIS (The European Chemical Substances Information System), provided by the European Commission Joint Research Centre in Ispra, Italy
Annex VI of the EU Council Directive 67/548/EEC
Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC
European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation)
EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

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/m3	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

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.