RESIN COMPONENT A **Firetonite® 6500**

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

Product name	Name of Substance Firetonite® 6500
Product type	EPOXY RESIN and fillers
Supplier	Amroy Europe Oy
Address/production	Savitie 2, FI – 16500 Herrala, Finland www.amroy.fi
Contact numbers/Emergency	Tel. +358 400 815 266 Fax. +358 20 711 8609 (production)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Preparation description: blend of liquid epoxy resin(s) and additives

Dangerous components/constituents

CAS Number		
25068-38-6	Bisfenol A and epichlorohydrin reaction result, epoxy resin	40 – 90 %
	Xi, N; R36/38, R43, R51/53	
20217-01-0	2,4-Dibromophenyl glycidyl ether	10 – 50 %
	Xi; R36/38, R43	
1309-64-4	Antimony trioxide	0 – 10 %
	Xn; R40	

3. HAZARDS IDENTIFICATION

Xi, N	**Irritant, toxic to aquatic environment**
R36/38	Irritating to eyes and skin.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitization by skin contact.
R51/53	Toxic to aquatic organism. May cause long term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Symptoms and effects	Irritation of the skin and eyes.
General information	Remove any clothing soiled by the product. Do not delay.
First Aid	
– inhalation	Supply fresh air and call for doctor for safety reasons.
– skin	Do not delay. Wash skin with water using soap if available. If persistent irritation occurs, obtain medical attention.
– eyes	Do not delay. Flush eyes with water for several minutes. If persistent irritation occurs, obtain medical attention immediately.
– ingestion	Do not induce vomiting. In the unlikely event of ingestion, obtain medical attention immediately.
Advice to Physicians	If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed.

5. FIRE FIGHTING MEASURES

Special hazards	Not classified as flammable, but will burn. Carbon monoxide may be involved incomplete combustion occurs.
Extinguishing media	
– small fires	dry chemical powder, carbon-dioxide, water spray, sand or earth
– large fires	water spray/small jet or alcohol-resistant foam
Unsuitable extinguishing media	water with a full water jet
Protective equipment	full protective clothing and self contained breathing apparatus
Other information	Keep adjacent containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with skin, eyes and clothing.
Personal protection	Wear protective clothing specified for normal operations (see section 8).
Environmental precautions	Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers. If material enters drains it should be pumped out into an open vessel. Emergence services may need to be called to assist in this operation.
Clean-up methods	
– small spillage	Absorb or contain liquid with sand, earth or spill control material. Shovel material to labelled sealable container for safe disposal.
– large spillage	Transfer to a labelled container for product recovery or safe disposal. Otherwise treat as for small spillage.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Ensure good ventilation at the work place.
Storage	Keep container tightly closed and dry. Palletised loads should be stacked to a maximum of 4 high.
Storage temperatures	Store in cool or ambient.

8. EXPOSURE CONTROLS / personal protection

Occupational exposure standards	None established.
Respiratory protection	Not normally required. In a confined space wear half mask respirator with organic vapour cartridge and build-in particular filter NPF 20 (gas only). If product is applied by spraying wear self contained breathing apparatus.
Hand protection	nitride rubber gloves or butyl rubber gloves, gauntlet type
Eye protection	mono-goggles
Body protection	standard issue work clothes, safety boots

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid / gel
Colour	clear / white / grey
Odour	slight
Density	1100 – 1300 kg/m^3 at 25 ^{o}C (typical)
Flash point	over 200 ^{o}C
Solubility in water	negligible

N-octanol/water partition coefficient data not available.

10. STABILITY / REACTIVITY

Stability	Stable under normal use conditions. Reacts with strong oxidising agents. Polymerises exothermically with amines, mercaptans and Lewis acids at ambient temperature and above. Polymerises in contact with bases (e.g. caustic soda), ammonia, primary and secondary amines, alcohols and acids.
Conditions to avoid	Caustic soda can induce a vaporous polymerisation at temperatures over 150 °C.
Materials to avoid	Strong oxidising agents. Caustic soda.

Hazardous decomposition products are not expected to form during normal storage.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
– oral	LD50 > 5000 mg/kg
– skin contact	LD50 > 5000 mg/kg
Eye irritation	irritant
Skin irritation	irritant
Respiratory irritation	not irritating
Skin sensitisation	skin sensitiser
Carcinogenicity	A recent review of the available data by the International Agency for Research on Cancer (IARC), has concluded that DGEBPA is not classifiable as to its carcinogenicity.
Mutagenicity	Positive in vitro, but negative in vivo assays.

12. ECOLOGICAL INFORMATION

Basis for assessment	Information given based on data on the components and the ecotoxicology of similar products.
Mobility	Sinks in water.
Persistence/degradability	Not readily biodegradable.
Bioaccumulation	Has the potential to bioaccumulate.
Acute toxicity – fish	toxic, 1 < LC50 $\leq$ 10 mg/l
Sewage treatment	toxic, LC50 > 1 – 10 mg/l, to organisms in sewage treatment plants

Toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Precautions	See section 8. Refer to section 7 before handling the product or containers.
Waste disposal	Recover or recycle if possible. Otherwise incineration or dispose to licensed contractor.
Product disposal	Drain container thoroughly. Rinse three times with suitable solvent. Treat rinses as for product disposal. After draining, vent in a safe place away from sparks and re. Send to drum re-use or metal recycling.
Local legislation	Product wastes within the scope of Directive 91/689/EEC. Control of Pollution Act 1974. Control of Pollution (Special waste) Regulations 1980. Environmental Protection Act 1990.

14. TRANSPORT INFORMATION

ADR / RID / Land transport	
Name	Environmentally hazardous liquid substance N.O.S (Epoxy resin)
Classification	9
UN Number	3082
Packaging group	3
Classification	Xi, N
Kemler code	90
IMDG / Sea transport	
Name	Environmentally hazardous liquid substance N.O.S (Epoxy resin)
Classification	9
UN Number	3082
Packaging group	3
Classification	Xi, N
EmS no.	8–05
Marine pollutant	yes
ICAO / IATA / Air transport	
Name	Environmentally hazardous liquid substance N.O.S (Epoxy resin)
Classification	9
UN Number	3082
Packaging group	3
Classification	Xi, N
Xi	**irritant**

15. REGULATORY INFORMATION

Label name	Epoxy resin (Number average, Molecular weight < 700); Firetonite® 6500
Classification	Irritant. Dangerous for the environment.
Labelling	**Xi, N**
Risk phrases	R36/38 Irritating to eyes and skin. 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 affects in the aquatic environment.
Safety phrases	S24 Avoid contact with skin. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 After contact with skin, wash immediately with plenty of soap and water. S37/39 Wear suitable gloves and eye/face protection. S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

16. OTHER INFORMATION

Uses and restrictions	Epoxy resin for civil engineering and composites industry.
MSDS distribution	This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of all persons involved with the product.

DISCLAIMER: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as a guarantee of any specific property of the product.