SAFETY DATA SHEET

Sheet finished product
Anthocyanins Quality C-75

Issue Number 04 Revision 01 dated 16/01/2018

approved by:

DALLARI ROBERTO S.R.L.

Via Gramsci, 5/b
42011 Bagnolo in Piano (RE)

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY / UNDERTAKING

1.1 Identification of the substance or preparation

Trade name:

ANTHOCYANINS QUALITY C-75

1.2 Use of the substance

Natural colorant for food.

1.3 Manufacturer

DALLARI ROBERTO S.r.l. Via Gramsci, 5/b – 42011 Bagnolo in Piano (RE);
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1.4 Emergency phone numbers

Tel. +39 0522.951024.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Substances presenting a danger to health or the environment according to Directive 67/548/CEE	**N. CAS**	**N. EINECS**	***Concentration* C [%]**	***Symbol***	***Phrases R***
Anthocyanins	84082-34-8	208-438-6 205-125-6 208-437-0 211-403-8 205-127-7	95 ≤ C [%] ≤ 100	-	-
Organic Acid					
Citric	77-92-9	201-069-1	C < 0,5		
Tartaric	133-37-9	201-766-0	C < 0,5	Xi	R36
Malic	617-48-1	210-514-9	C < 0,5	Xi	R36
Succinic	110-15-6	203-740-4	C < 0,5	Xi	R36
Fumaric	110-17-8	607-146-00-X	C < 0,5	Xi	R36
Heavy metals					
Arsenic	7440-38-2	231-901-9	C < 0,5	T	R45; R23/25
Cadmium	7440-43-9	231-152-8	C < 0,5	T+, N	R45; R26; R48/23/25; R62; R63; R68; R50/53
Chrome	7440-47-3	231-157-5	C < 0,5	T, C	R34; R52/53
Iron	7439-89-1	215-721-8	C < 0,5	C	R34
Manganese	7439-96-5	231-105-1	C < 0,5	C	R34
Magnesium	7439-95-4	231-104-6	C < 0,5	Xi	R15; R17
Mercury	7439-97-6	231-106-7	C < 0,5	T	R23; R33
Nickel	7440-02-0	231-111-4	C < 0,5	Xi	R36/38
Lead	7439-92-1	231-100-4	C < 0,5	T	R61; R20/22; R33
Other parameters					
Sulfur dioxide	7446-09-5	231-195-2	0,1 < C < 0,5	T, C	R23; R34

3. HAZARDS IDENTIFICATION

3.1 Classification according to Regulation (CE) No. 1272/2008

None

3.2 Classification according to Directive 67/548/CEE or Directive 1999/45/CE

The preparation is not classified according to Directive 1999/45/CE.
The preparation is not subject to classification according to the calculation method of the General EU Directive 67/548/CE Directive on the classification of substances.

3.3 Information concerning particular hazards for human health and the environment
The product has to be labeled due to the calculation procedure of the "General EU Classification of Substances", Dir 67/548/CE, in the latest version validated, and the "General EU Classification Guidelines for Preparations" Dir 1999/45/CE, in the latest version validated.

3.4 Label elements according to Regulation (CE) No. 1272/2008
The preparation is classified and labeled according to the CLP regulation.

3.5 Hazard pictogram
None.

3.6 Instructions
Do not litter.

3.7 Hazard
Harmful if swallowed.

3.8 Safety advice
P280 Wear protective gloves / protective clothing / eye protection / face;
P264 Wash thoroughly after handling;
P305+P351+P338 IN CASE OF CONTACT WITH EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue to rinse;
P337+P313 If eye irritation persists, consult a physician.

3.9 Other hazards which results from the evaluation PBT e vPvB
PBT: not applicable;
vPvB: not applicable.

3.10 Health hazards
Potential health effect.

4. FIRST AID
4.1 Description of first aid measures
4.2 Inhalation
Remove from exposure and move to fresh air immediately. If symptoms persist, consult a doctor.

4.3 Contact with skin
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. In case of skin irritation continues, consult a doctor.

4.4 Contact with eyes
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

4.5 Ingestion
Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of water.

4.6 Advice to doctor
Show this safety data sheet to physician.

4.7 Most important symptoms and effects, both acute and delayed
No further information.

4.8 Indication of any immediate medical attention and special treatment needed
No further information.

5. FIRE FIGHTING MEASURES

5.1 General Information
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During, irritating and highly toxic gases may be generated by thermal decomposition or combustion. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

5.2 Suitable extinguishing agents
In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Fire fighting measures that are compatible with adjacent products.

5.3 Special hazards arising from the substance or mixture
Carbon monoxide and carbon dioxide.

5.4 Advice for firefighters. Protective equipment
Do not inhale gases in case or fire or combustion. Cool containers at risk with water spray.

5.5 Other indications
Cool containers at risk with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1 General Information
Use proper personal protective equipment, as indicated in Section 8.

6.2 Personal precautions, protective equipment and emergency procedures
Of fumes, dust and aerosol respiratory protection and use of personal protective equipment.

6.3 Environmental precautions
Do not allow to enter drainage system, surface water or ground water. In case of seepage into water course or sewage alert the relevant authorities.

6.4 Methods and materials for containment and cleaning up
Aspirate the liquid into a suitable container and absorb the remainder with a porous material (eg, diatomite, acid binders, universal binders, etc.). Pick up mechanically. For fine dusts use a vacuum cleaner.

6.5 Reference to other sections
For information on safe handling, see Chapter 7. For information on personal protection equipment see Chapter 8. For information on disposal see Chapter 13.

7. HANDLING AND STORAGE

7.1 Handling

7.2 Precautions for safe handling

Avoid the formation of aerosols and the dispersion of the preparation in air. Provide appropriate exhaust ventilation at the workplace where they develop aerosols and vapors.

7.3 Information about protection against explosions and fires

No special measures required.

7.4 Conditions for safe storage, including any incompatibilities

7.5 Storage

7.6 Requirements for storerooms and containers

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Provide acid-resistant floor.

7.7 Indication about storage

Do not store together with alkalis (sodium, potassium, etc.).

7.8 Further information about storage conditions

Keep container tightly closed.

7.9 Specific end use

No further information.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Additional information about design of technical facilities

No further data, see Chapter 7.

8.2 Control parameters

8.3 Components with limit values that require monitoring at the workplace

TLV not established.

8.4 Additional information

The lists valid during the making were used as basis.

8.5 Exposure controls

8.6 Personal protective equipment

In the case of aerosol formation use a respirator with approved filter. For a short period use a filtering apparatus suitable for the danger.

8.7 General protective and hygienic measures

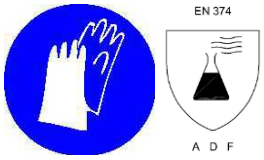
Keep away from foodstuffs, beverages and feed. Immediately remove all contaminated clothing. Avoid contact with eyes.

8.8 Respiratory protection

Filter P2, in the case of processes that produce aerosols and vapors.

8.9 Protective gloves

Resistant gloves preparations acids. The selected protective gloves have to satisfy the specifications of EU Directive 89/89/CEE and standards (EN 374) derived from them.



8.10 Material of gloves

The glove material has to be impermeable and resistant to the preparation-the substance-the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Thin, disposable gloves in PVC, PE or nitrile rubber.

8.11 Eye protection

Tightly sealed goggles.

8.12 Body protection

Choose body protection according to the amount and concentration of hazardous substances in the workplace.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical

physical state	liquid
Color	brown
odor	slightly acid
Odour threshold	Undetermined
pH values at 25 ° C	1,2
Density at 20 ° C	1,218
Flammability	not flammable
Solubility in / Miscibility with water at 25 ° C	complete
Explosion limit	not applicable
Lower explosive limit	Undetermined
Upper flammability limit	Undetermined
More information	No further information

10 STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical stability

10.3 Thermal decomposition / conditions to be avoided

The preparation no decomposition if used according to specifications.

10.4 Possibility of hazardous reactions

This product may react violently with alkalis (alkaline solutions) or amines in bulk.

10.5 Conditions to avoid

No further information.

10.6 Incompatible materials
Strong bases;
Strong reducing agents;
Metals.

10.7 Hazardous decomposition products
Carbon monoxide, carbon dioxide.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.2 Acute toxicity
No further information.

11.3 Primary irritant

11.4 On the skin
May cause skin irritation.

11.5 On the eye
Classified as having irritating.

11.6 Ingestion
May be harmful if swallowed.

11.7 Inhalation
May be harmful if inhaled.

11.8 Sensitization
Not sensitizing effects known.

11.9 Other information (about experimental toxicology)
No more relevant data available. Based on our experience and the information available, the product is not harmful to health if used and handled according to specifications.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

12.2 Aquatic toxicity
No further information.

12.3 Ecological information
No further information.

12.4 Additional information
The product is readily biodegradable.

12.5 Behaviour in environmental systems

12.6 Potential for bioaccumulation
No further information.

12.7 Additional information on the environment

12.8 Additional information

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow to reach ground water, water course or drainage ditch undiluted product or large quantities.

12.9 Results of PBT and vPvB

PBT: Not applicable;
vPvB: Not applicable.

12.10 Other adverse effects

No further information.

13 DISPOSAL

13.1 Methods of treatment of the waste

13.2 Advice

Must not be disposed together with household garbage. Do not empty into drains. Recycle if possible or contact a disposal of industrial waste.

13.3 Waste code

The European Union does not establish uniform rules for the disposal of chemical waste, which are special waste. Their treatment and elimination of the domestic legislation of each country. So, in each case, you should contact the relevant authorities, or those companies legally authorized for elimination of waste.
2001/573/EC: Council Decision of 23 July 2001 amending the list of wastes contained in Decision 2000/532/EC;
Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

13.4 Packaging

The containers and packing materials contaminated with dangerous substances or preparations, have the same treatment products and preparations.
Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste.

13.5 Advice

Disposal according to official regulations. The packaging that may not be cleansed are to be disposed of in the same way of the preparation. Wash with solvents to be incinerated.

14 TRANSPORT INFORMATION

14.1 Information on the transport classification.

Number ONU, ADR, IMDG, IATA	-
Shipping Name of ONU, ADR, IMDG, IATA	not applicable
Classes of Transport hazard ADR, IMDG, IATA, Class	not classified – No hazardous product
Packing group ADR, IMDG, IATA	-
Environmental hazards (Marine pollutant)	NO
Special precautions for users	not applicable
Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code	not applicable
UN "Model Regulation"	ADR 2009 – Italian Official Translation, ed. ARS IT editions

15 REGULATORY INFORMATION

15.1 Standards and legislation on health, safety and environment specific for the substance or mixture

15.2 National regulations

When applicable, refer to the following regulations and their subsequent additions:
DPR 303/56 (Article 64: health checks, prevention occupational diseases);
D.Lgs. 475/82 (Personal Protective Equipment);
D.Lgs. 81/08 and following (safety and health of workers at the workplace);
D.Lgs. 52/97 (Classification, packaging and labeling of dangerous substances);
D.Lgs. 25/02 (Chemical Agents);
D.Lgs. 65/03 (Classification, packaging and labeling of dangerous preparations);
D.Lgs.152/06 (Emissions into the atmosphere, liquid, liquids, waste).

15.3 Hazard Class for water

Water hazard 1 (WGK1) (Self-assessment): little dangerous.

15.4 Chemical Safety Assessment

A chemical safety assessment has not been carried out. The chemical risk assessment must be performed by the end user.

16 OTHER INFORMATION

These data are based on our current knowledge, shall not constitute a guarantee for any specific preparation and shall not establish a legally valid contractual relationship. The Company DALLARI ROBERTO Srl can not be held responsible for any damage resulting from handling or from contact with the product above.

16.1 References

ECDIN (Environmental Chem. Data and Information Network);
IUCLID (International Uniform Chemical Information Database);
NIOSH – Registry of Toxic Effects of Chemical Substances;
Roth – Wassergefährdende Stoffe;
Verschueren – Handbook of Environmental Data on Organic Chemicals;
ChemDAT – Safety Data Sheets from E. Merck on CD-ROM;
Merian – Metals and their compounds in the environment.

16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road);
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail);
IMDG: International Maritime Code for Dangerous Goods;
IATA: International Air Transport Association;
ICAO: International Civil Aviation Organization;
GHS: Globally Harmonized System of Classification and Labelling of Chemicals;
AIDII: Associazione Italiana Degli Igienisti Industriali per l'Igiene Industriale e per l'Ambiente;
ACGIH: American Conference of Governmental Industrial Hygienists;
EINECS: European Inventory of Existing Commercial Chemical Substances;

CAS: Chemical Abstracts Service (division of the American Chemical Society).

16.3 Sources

Directive 67/548/CEE and following amendments and adjustments;
Regulation (CE) N ° 1907/2006 of the European Parliament and of the Council of 18 December 2006, REACH;
Regulation (CE) N ° 1272/2008 of the European Parliament and of the Council of 16 December 2008, CLP, as amended;
Globally Harmonized System, GHS;
D. Lgs. 81/2008 and subsequent amendments.