

1. Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Commercial name Supercold revitalizer for A/C and refrigeration systems
Our code 70542R – 80542R

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

Industrial sector Automotive, Refrigeration and air-conditioning
Relevant identified uses A/C system boost lubricant and temperature reducer/cooling accelerator
Application Industrial and professional

1.3 Details of the supplier of the safety data sheet

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1.4 Emergency telephone number

Mariel Srl +39 0322 838319 **Mon/Fri: 8.30-12.30 / 13.30-17.30**
CAV-CNIT Anti-Poison (toxicological) National Information Centre +39 0382 24444 **Hours: 24 h / 24 h**

2. Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) 1272/2008 (CLP) Not classified
Classification according to Directives 67/548/CEE and 1999/45/CE Not classified

2.2 Elements of the label

Labelling according to Regulation (EC) 1272/2008 (CLP) No labelling applicable

Labelling according to Directives 67/548/CEE e 1999/45/CE

Precautionary statements (P) P273 Avoid release to the environment.
P280 Wear protective gloves and eye protection.

2.3 Other hazards

The mixture does not contain any substance considered as PBT or vPvB.

The mixture does not contain any substance included in Annex XIII of the Regulation (EC) 1907/2006.

3. Composition/information on ingredients**3.2 Mixture**

The mixture does not contain any substances to be mentioned according to criteria of section 3.2 of REACH annex II.

4. First aid measures**4.1 Description of first aid measures**

Inhalation Remove the subject from the contaminated area and exposure him to fresh air. Obtain immediate medical attention.
Skin contact Remove contaminated clothing. Wash immediately with plenty of water or, if possible, take a shower. In case of skin irritation (e.g. redness) consult a doctor. Wash the contaminated garments before reusing them.
Eye contact Remove any contact lenses. Rinse immediately with plenty of water, even under the eyelids, for at least 15 minutes. Consult a doctor.
Ingestion Rinse the mouth thoroughly with water. Do not induce vomiting. Consult a doctor immediately

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.
Ingestion of large quantities: diarrhoea.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Carbon dioxide (CO ₂), foam, chemical powder, water spray.
Unsuitable extinguishing media	High volume water jet.

5.2 Special hazards arising from the substance or mixture

In case of fire, can form: Carbon oxides, toxic gases.

5.3 Advice for firefighters

Coordinate fire-fighting measures to the fire surroundings.
Stop spill/release if it can be done safely.
Cool the containers with water jets to prevent product decomposition and the development of substances potentially dangerous for health.
Do not breathe fumes or mist.
Always wear full fire protection equipment.
Collect the extinguishing waters that must not be discharged into the drains.
Dispose of contaminated water used for extinction and fire residue according to current regulations.

Other information

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
For more information, see section 10.

6. Accidental release measure

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient ventilation / air.
Avoid contact with eyes and skin.
If necessary, wear appropriate protective equipment (including personal protective equipment referred to in section 8 above).
If applicable, caution – risk of slipping.

6.2 Environmental precautions

Try to stop leak if safe to do so.
Prevent the product from entering drainage system, sewers, surface water or groundwater.
Inform the competent authorities in case of accidental infiltration into the sewage system.
Do not release the product in the environment.

6.3 Methods and material for containment and cleaning up

Soak up the product with inert absorbent material (sand, universal binding agent, diatomaceous earth, etc.).
Disposal of contaminated material must be carried out in accordance with the provisions of section 13.

6.4 Reference to other sections

For more information regarding individual protection or disposal, see sections 5, 8 and 13.

7. Handling and storage

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation or sufficient air exchange.
Avoid contact with eyes and skin.
Keep away from heat, sparks and open flames.
Do not smoke or use matches or lighters.
Avoid dispersion of the product in the environment.
Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
Wash hands before and after handling the product.
Do not smoke, drink or eat while handling the product.
Keep out from food, drinks or pets' food.
Remove contaminated clothing and protective equipment before entering areas where food is consumed.

7.2 Conditions for safe storage, including any incompatibility

Store product in the original containers and closed.
Store in a cool, dry and well-ventilated place.
Keep away from heat sources, open flames, sparks and other sources of ignition.
Under all circumstances, prevent penetration into the soil.

7.3 Specific end use(s)

No data available.

8. Exposure controls/personal protection

8.1 Control parameters

n.d.a.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Adopt adequate ventilation in places where the product is spilled.
Ensure a general air exchange system.
Contain the product with absorbent material: dry oil.
Remove the absorbent and dispose according the regulations.

8.2.2 Individual protection measures, such as personal protective equipment

- a) Eye/face protection** Operate according to good work practices. Hermetic safety glasses (according to directive EN 166), are recommended to protect the eyes from splashes.
- b) Skin protection**
- i) Hand protection Thermal-protective gloves resistant to chemical products, category III (EN 374) are recommended. The gloves' wear time depends on the duration. Gloves should be replaced immediately if they show signs of wear or deterioration. In case of repeated and prolonged contact, use a moisturizing hand cream.
 - ii) Other Wash hands thoroughly after exposure. Long-sleeved clothes are recommended. Remove or clean contaminated clothing. Apron or protective clothing are not necessary.
- c) Respiratory protection** Normally not required in areas with suitable ventilation and sufficient air exchange. In the areas with poor ventilation or in the event of probable spraying, wear an open circuit compressed air breathing apparatus (EN 137) or an external air intake respirator (EN 138). For the correct choice of the respiratory protection device, refer to the EN 529 standard.



8.2.3. Environmental exposure controls

Handling in accordance with good industrial hygiene and safety practice.

Prevent spillage of the product into the drains or watercourses. Dispose of the washing water according to national and local regulations.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Liquid
Colour	Transparent, clear
b) Odour	Characteristic
c) Odour threshold	Not determined
d) pH	Not determined
e) Melting point	Not determined
f) Initial boiling point	Not determined
g) Flash point	> 225 °C
h) Evaporation rate	n.a.
i) Flammability	n.a.
j) Upper/lower flammability	Not determined
k) Vapour pressure	Not determined
l) Vapour density	Not determined
m) Relative density	0,82 – 0,88 g/ml @ 20 °C
n) Solubility (in the water)	Insoluble
o) Partition coefficient: n-Octanol/water	Not determined
p) Self-ignition temperature	Not determined
q) Decomposition temperature	Not determined
r) Viscosity	100
s) Explosive properties	n.a.
t) Oxidising properties	Not determined

9.2 Other information

Liposolubility	Not determined
Conductivity	Not determined
Surface tension	Not determined
Solvent contents	n.a.

10. Stability and reactivity

10.1 Reactivity

Stable under normal handling and storage conditions.

10.2 Chemical stability

Stable under normal handling and storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

10.5 Incompatible materials

None to our knowledge.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

11.1 Information on toxicological effects

a) Acute toxicity

Inhalation LD50: > 5000 mg/Kg
Animal species: Rat

b) Skin corrosion/irritation n.d.a.

c) Significant damage/eye irritation n.d.a.

d) Respiratory and skin sensitization n.d.a.

e) Germ cell mutagenicity n.d.a.

f) Carcinogenicity Ames test: Negative for the modified test

g) Reproductive toxicity n.d.a.

h) STOT-single exposure n.d.a.

i) STOT-repeated exposure n.d.a.

11.2 Other information

Classification according to the calculation procedure.

For more information on components that are hazardous to health, see sections 2 and 8.

12. Environmental information

12.1 Toxicity

Fish n.d.a.
Aquatic invertebrates n.d.a.
Algae n.d.a.

12.2 Persistence and degradability

n.d.a.

12.3 Bio-accumulative potential

n.d.a.

12.4 Mobility in soil

Avoid infiltration into the ground.

12.5 Results of PBT and vPvB assessment

The product does not contain PBT and vPvB substances.

12.6. Other adverse effects

n.d.a.

13. Disposal consideration

13.1 Waste treatment methods

General info	Wastes, debris, empty containers, disused work clothes, contaminated cleaning materials such as cloths, paper or other organic material must be collected and properly disposed of.
Disposal methods	Dispose the product in accordance with local and national regulations. Container should be completely empty. Untaminated packaging can be recycled. Dispose of packaging that cannot be cleaned in the same way as the substance. Do not pierce or incinerate the containers, even if they are empty.

The user is obliged to observe compliance with EC, state and/or local regulations regarding waste disposal.

European Waste Code (EWC)

13 03 08* Exhaust oils of liquid fuels – synthetic isolating oils and thermos-conductors.

14. Transport information

14.1 UN Number Not applicable

Transport by road (ADR) / Transport by rail (RID)

14.2 UN proper shipping name Not applicable
14.3 Danger classes related to transport Not applicable
14.4 Packing group Not applicable
14.5 Environmental hazards Not applicable

Transport by air (IATA/ICAO)

14.2 UN proper shipping name Not applicable
14.3 Danger classes related to transport Not applicable
14.4 Packing group Not applicable
14.5 Environmental hazards Not applicable

Transport by sea (IMDG)

14.2 UN proper shipping name Not applicable
14.3 Danger classes related to transport Not applicable
14.4 Packing group Not applicable
14.5 Environmental hazards Not applicable

14.6 Special precautions for users

Unless otherwise specified, general transport safety measures must be carried out.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code.

n.a.

15. Regulatory information

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

The product is not subject to labelling according to EC directives or the corresponding national regulations.

15.2 Chemical safety assessment

No Chemical Safety Assessment (CSA) has been made for this product.

16. Other information

This Safety Data Sheet has been prepared in accordance with the current European Directive in force.

Full text of precautionary statements (P) in section 2

P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection.

History Version 1 by Mariel Srl
Date: 08/2019

b) Abbreviations and acronyms

ADR Accord Dangerous Route
CAS Chemical Abstract Service number
CE / EC European Community
CLP Classification, Labelling, Packaging
CSA Chemical Safety Assessment
EWC European Waste Code
GHS Globally Harmonized System
IATA International Air Transport Association



Material safety data sheet according regulation (EU) 2015/830
Version 1 – Date: 29th August, 2019

IBC code	International Bulk Chemical code
ICAO	International Civil Aviation Organization
IMDG code	International Maritime Dangerous Good code
ISO	International Standardization Organization for
LD50	Lethal Dose 50%
MARPOL	Maritime Pollution
n.a.	not applicable
n.d.a	no data available
ONU	United Nations Organization
PBT	Persistent, Bioaccumulative, Toxic
POE	Polyolester oil
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Rail International Dangerous goods transport
STOT-RE	Specific Target Organ Toxicity – repeated exposure
STOT-SE	Specific Target Organ Toxicity – single exposure
TLV-TWA	Threshold Limit Value - Time Weighted Average
UE / EU	European Union
vPvB	very Persistent very Bioaccumulative

General bibliography

1. Regulation (UE) 1907/2006 of the European Parliament (REACH)
2. Regulation (UE) 1272/2008 of the European Parliament (CLP)
3. Regulation (UE) 790/2009 of the European Parliament (I Atp. CLP)
4. Regulation (UE) 2015/830 of the European Parliament
5. Regulation (UE) 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (UE) 618/2012 of the European Parliament (III Atp. CLP)
7. Regulation (UE) 487/2013 of the European Parliament (IV Atp. CLP)
8. Regulation (UE) 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (UE) 605/2014 of the European Parliament (VI Atp. CLP)

Notice of liability

This information should not be considered a guarantee or a specification of the quality of the product. This information is provided with the purpose of allowing the use, storage, transport and disposal of the product in the most correct and safe ways for workers and the environment.

The information contained in this safety data sheet are based on our current knowledge and EU and national laws; they describe the product only with regard to safety requirements. The conditions of the user are beyond our knowledge and control. The product should not be used for purpose other than those specified. It is always the responsibility of the user to take all the necessary measures to comply with the requirements of current legislation. The information contained in this form should not considered as a guarantee of its properties.
