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According to 190/2006/EC (REACH), 1272/2008/EC (CLP) and GHS

Printing Date 25.08.2014 Revision 25.08.2014

SECTION 1

IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER/TRADE NAME:

STAR MACRO-DECK

1.2 RELIVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST:

No further relevant information available.

Application of the Substance / the Mixture: Coating and Penetrant for Concrete Surfaces

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

Manufacturer/Supplier: Specialty Technology And Research, Incorporated (S.T.A.R., Inc.)

1150 Milepost Drive, Columbus, Ohio 43228

Tel: +1-614-870-0744 • Fax: +1-614-870-0598 • Toll Free +1-800-759-1912

Web Site: www.starseal.com

1.4 EMERGENCY TELEPHONE NUMBER:

ChemTel. Inc.

(800)255-3924, +1(813)248-0585

SECTION 2

HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

This product is not classified as hazardous according to the Globally Harmonized System (GHS)

2.2 Label Elements

The product does not have a classification according to the CLP regulation

This product is not classified as hazardous according to the OSHA GHS regulations within the United States

Hazard pictograms Not Regulated

Signal word Not Regulated

Hazard-determining components of labeling: None

Hazard statements Not Regulated

Hazard description:

WHMIS-symbols: Not hazardous under WHMIS

Classification system: NFPA ratings (Scale 0-4)



Health = 1

Fire = 1

Reactivity = 0

HMIS ratings (Scale 0-4)



Health = 1 Fire = 1

Reactivity = 0

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2.3 Other Hazards

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

SECTION 3

COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions

Dangerous components: None in reportable quantities

Dangerous Components (Alternative Classifications):						
	Acrylic Polymer	25-50%				
CAS: 25265-77-4	2.2.4-trimethyl-1.3-pentanediol mono(2-methylpropanoate)	≤2.5%				
	Non-Hazardous Ingredients substance with a Community workplace exposure limit	≤2.5%				
CAS: 126-86-3	2.4.7.9tetramethyldec-5-yne-4.7-diol Eye Damage 1, H318	≤ 2.5%				
	Skin Sens. 1B, H317 Aquatic Acute 3, H402; Aquatic Chronic 3, H412					
CAS: 107-21-1	Ethanediol Acute Tox. 4, H302	≤ 2.5%				

SECTION 4

FIRST AID MEASURES

4.1 Description of first aid measures

General information: No special measures required.

After inhalation:

Supply fresh air; consult doctor in case of complaints.

After skin contact:

Wash with water and soap.

If skin irritation is experienced, consult a doctor.

After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Headache

Gastirc or intestinal disorders when ingested

Nausea in case of ingestion

Slight irritant effect on eyes.

Danger No further relevant information available

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available

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SECTION 5

FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: None

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information No further relevant information available

SECTION 6

ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Particular danger of slipping on leaked/spilled product

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation

Send for recovery or disposal in suitable receptacles.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7

HANDLING AND STORAGE

7.1 Precautions for safe handling

Prevent formation of aerosols

Avoid splashes or spray in enclosed areas

Use only in well ventilated areas.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Provide ventilation for receptacles

Avoid storage near extreme heat, ignition sources or open flame.

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Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Keep receptacle tightly closed.

Protect from frost.

7.3 Specific end use(s) No further relevant information available.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Respiratory protection:

Not required under normal conditions of use.

Use suitable respiratory protective device when aerosol or mist is formed.

Use suitable respiratory protective device when high concentrations are present.

For spills, respiratory protection may be advisable.

Protection of hands:

Protective gloves



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Eye protection:

Safety glasses



Body protection:

Protective work clothing

Limitation and supervision of exposure into the environment

No further relevant information available.

Risk management measures

See Section 7 for additional information.

8.3 Other Information: No further relevant information available.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information:

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Form	Fluid Liquid				
Color	Light Green				
Odor	Characteristic				
Odor Threshold	Not determined				
DI: Mala	7000				

Change in Condition:

Melting point/Melting RangeNot Determined

Boiling point/Boiling range>212° F / >100° C (414°F / 212°F) Flash Point.....>200° F / >93° C (>392° F / >199°F)

Flammability (Solid Gaseous)......Not Applicable Auto/Self-Ignition TemperatureNot determined **Decomposition Temperature**Not determined

Self-IgnitingProduct is not self-igniting.

Danger of Explosion Product does not present an explosion Hazard.

Explosion Limits:

LowerNot determined UpperNot determined

Vapor Pressure25mm Hg

Density at 20° C......1.03 g/cm³ (8.595 lbs/gal)

Relative DensityNot Determined

Evaporation Rate1 (Water=1) Solubility in/Miscibility with Water Fully miscible Partition Coefficient (n-octanol/water) Not Determined

Viscosity:

DynamicNot Determined KinematicNot Determined

9.2 Other Information: No further relevant information available

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SECTION 10

STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition/conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point.

Reacts with strong oxidizing agents.

Reacts with strong acids.

10.4 Conditions to avoid:

Store away from oxidizing agents.

Keep away from heat and direct sunlight

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11

TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Primary irritant effect:

On the skin: Slight irritant effect on skin and mucous membranes.

On the eye: Slight irritant effect on eyes. Sensitization: No sensitizing effects known.

Additional toxicological information:

Product is suspected to cause damage to fertility

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenic categories:

NTP (National Toxicology Program)

None of the ingredients is listed

OSHA (Occupational Safety & Health Administration):

None of the ingredients is listed

SECTION 12

ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity: No further relevant information available

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

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12.6 Other adverse effects: No further relevant information available.

SECTION 13

DISPOSAL CONSIDERATION

13.1 Waste treatment methods

Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14

TRANSPORTATION INFORMATION

14.1 UN-Number

DOT, ADR, ADN, IMDG, IATA Not Regulated

14.2 UN proper shipping name

DOT, ADR, ADN, IMDG, IATA Not Regulated

14.3 Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class Not Regulated

14.4 Packing group

DOT, ADR, IMDG, IATA Not Regulated

14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions for user: Not Applicable

14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

UN "Model Regulation":

SECTION 15

REGULATORY INFORMATION

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

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed

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Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenic Categories

EPA (Environmental Protection Agency)

None of the ingredients is listed

IARC (International Agency for Research on Cancer)

None of the ingredients is listed

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL)

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed

Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed

Other regulations, limitations and prohibitive regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16

OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of preparation / last revision 11/24/2014

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)

International Maritime Code for Dangerous Goods IMDG:

DOT: US Department of Transportation IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

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Columbus, Ohio 43228



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ACGIH: American Conference of Governmental Industrial Hygienists European Inventory of Existing Commercial Chemical Substances **EINECS:**

European List of Notified Chemical Substances ELINCS:

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

Derived No-Effect Level (REACH) DNEL:

PNEC: Predicted No-Effect Concentration (REACH)

Sources

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- END OF SDS -