



SAFETY DATA SHEET 28364 BROWN PASTE

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name 28364 BROWN PASTE

Product number 60354

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

Identified uses Colourant

1.3. Details of the supplier of the safety data sheet

Supplier Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
SDS.EMEA@univarsolutions.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 60354

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

Environmental The product is not expected to be hazardous to the environment.

2.2. Label elements

Hazard statements NC Not Classified

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

28364 BROWN PASTE

GLYCERINE			60-100%
CAS number: 56-81-5	EC number: 200-289-5		
Classification Not Classified			
IRON OXIDE BLACK POWDER			10-30%
CAS number: 1317-61-9	EC number: 215-277-5	REACH registration number: 01-2119457646-28-XXXX	
Classification Not Classified			
RED IRON OXIDE			10-30%
CAS number: 1309-37-1	EC number: 215-168-2	REACH registration number: 01-2119457614-35-XXXX	
Classification Not Classified			

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

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

Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

4.2. Most important symptoms and effects, both acute and delayed

Eye contact May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Oxides of the following substances: Carbon.

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Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

GLYCERINE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ mist

IRON OXIDE BLACK POWDER

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ fume

Short-term exposure limit (15-minute): WEL 10 mg/m³ fume
as Fe

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

RED IRON OXIDE

28364 BROWN PASTE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ fume

Short-term exposure limit (15-minute): WEL 10 mg/m³ fume
as Fe

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

WEL = Workplace Exposure Limit.

Ingredient comments No exposure limits known for ingredient(s).

GLYCERINE (CAS: 56-81-5)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Industry - Inhalation; Long term local effects: 56 mg/m ³ General population - Inhalation; Long term local effects: 33 mg/m ³ General population - Oral; Long term systemic effects: 229 mg/kg/day
PNEC	- Fresh water; 0.885 mg/l - marine water; 0.0885 mg/l - Intermittent release; 8.85 mg/l - STP; 1000 mg/l - Soil; 0.141 mg/kg - Sediment (Freshwater); 3.3 mg/kg - Sediment (Marinewater); 0.33 mg/kg

IRON OXIDE BLACK POWDER (CAS: 1317-61-9)

DNEL	Workers - Inhalation; Long term local effects: 10 mg/m ³
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RED IRON OXIDE (CAS: 1309-37-1)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Workers - Inhalation; Long term local effects: 10 mg/m ³

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374.

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Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Paste.
Colour	Brown.
Odour	Characteristic.
Odour threshold	No specific test data are available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	No information available.
Bulk density	No information available.
Solubility(ies)	Miscible with water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	Not determined.
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Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not known.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
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10.5. Incompatible materials

Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin corrosion/irritation

Animal data	No information available.
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Serious eye damage/irritation

Serious eye damage/irritation	No information available.
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Respiratory sensitisation

Respiratory sensitisation	No information available.
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Skin sensitisation

Skin sensitisation	No information available.
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Germ cell mutagenicity

Genotoxicity - in vitro	No information available.
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Carcinogenicity

Carcinogenicity	No information available.
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Reproductive toxicity

28364 BROWN PASTE

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation May cause respiratory irritation.

Ingestion Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

Skin contact May be slightly irritating to skin.

Eye contact May cause temporary eye irritation.

Toxicological information on ingredients.

GLYCERINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 27,200.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 27200 mg/kg, Oral, Rat

ATE oral (mg/kg) 27,200.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 56750 mg/kg, Dermal, Guinea pig

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 2.75 mg/l, Inhalation, Dust/Mist, Rat (sat. atm. 0 Death.)

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

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Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Slightly irritating.

Eye contact May cause temporary eye irritation.

IRON OXIDE BLACK POWDER

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Animal data No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Genotoxicity - in vivo No information available.

Carcinogenicity

Carcinogenicity No information available.

28364 BROWN PASTE**Reproductive toxicity**

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion May cause stomach pain or vomiting. Diarrhoea.

Skin contact Prolonged contact may cause dryness of the skin.

Eye contact May cause temporary eye irritation. Particles in the eyes may cause irritation and smarting.

RED IRON OXIDE**Acute toxicity - oral**

Notes (oral LD₅₀) LD₅₀ > 10000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Ames test: Negative. Chromosome aberration: Negative. OECD 473

Genotoxicity - in vivo Negative.

Carcinogenicity

Carcinogenicity No information available.

28364 BROWN PASTE

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Shortness of breath. Coughing, chest tightness, feeling of chest pressure.

Ingestion May cause discomfort if swallowed. Symptoms following overexposure may include the following: Stomach pain. Diarrhoea. Nausea, vomiting.

Skin contact Prolonged skin contact may cause temporary irritation.

Eye contact Particles in the eyes may cause irritation and smarting.

SECTION 12: Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

GLYCERINE

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

IRON OXIDE BLACK POWDER

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

RED IRON OXIDE

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

GLYCERINE

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Toxicity	Not considered toxic to fish.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 54000 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 96 hour: >= 885 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 24 hours: > 10000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 2900 mg/l, Freshwater algae
Acute toxicity - microorganisms	EC ₅₀ , 3 hour: > 1000 mg/l, Activated sludge

IRON OXIDE BLACK POWDER

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 48 hours: >1000 mg/l, Leuciscus idus (Golden orfe)

RED IRON OXIDE

Toxicity	Not considered toxic to fish.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hour: >=10000 mg/l, Brachydanio rerio (Zebra Fish) LC ₅₀ , 96 hour: >1000 mg/l, Leuciscus idus (Golden orfe) LC ₅₀ , 96 hour: >1000 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: >10000 mg/l, Daphnia magna
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: >10000 mg/l, Activated sludge

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.**GLYCERINE**

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 82%: 20 days OECD 301D - Degradation 63%: 28 day OECD 301C
Biological oxygen demand	0.87 g O ₂ /g substance

IRON OXIDE BLACK POWDER

Persistence and degradability	The product is not expected to be biodegradable.
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RED IRON OXIDE

28364 BROWN PASTE**Persistence and degradability**

The product contains only inorganic substances which are not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.**GLYCERINE**

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: -1.76

IRON OXIDE BLACK POWDER

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

RED IRON OXIDE

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility The product is miscible with water and may spread in water systems.

Ecological information on ingredients.**GLYCERINE**

Mobility The product is soluble in water.

IRON OXIDE BLACK POWDER

Mobility The product is insoluble in water and will sediment in water systems.

RED IRON OXIDE

Mobility The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.**GLYCERINE**

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

IRON OXIDE BLACK POWDER

28364 BROWN PASTE**Results of PBT and vPvB assessment**

This product does not contain any substances classified as PBT or vPvB.

RED IRON OXIDE**Results of PBT and vPvB assessment**

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects**Other adverse effects** Not determined.**Ecological information on ingredients.****GLYCERINE****Other adverse effects** No information available.**IRON OXIDE BLACK POWDER****Other adverse effects** Not determined.**RED IRON OXIDE****Other adverse effects** Not determined.**SECTION 13: Disposal considerations****13.1. Waste treatment methods****General information** Do not puncture or incinerate, even when empty. Waste should be treated as controlled waste.**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.**SECTION 14: Transport information****General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).**14.1. UN number**

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards**Environmentally hazardous substance/marine pollutant**

No.

14.6. Special precautions for user

Not applicable.

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14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

CAS: Chemical Abstracts Service.

DNEL: Derived No Effect Level.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

Kow: Octanol-water partition coefficient.

LC₅₀: Lethal Concentration to 50 % of a test population.

LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).

PBT: Persistent, Bioaccumulative and Toxic substance.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.

vPvB: Very Persistent and Very Bioaccumulative.

IARC: International Agency for Research on Cancer.

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.

cATpE: Converted Acute Toxicity Point Estimate.

BCF: Bioconcentration Factor.

BOD: Biochemical Oxygen Demand.

EC₅₀: 50% of maximal Effective Concentration.

LOAEC: Lowest Observed Adverse Effect Concentration.

LOAEL: Lowest Observed Adverse Effect Level.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level.

NOEC: No Observed Effect Concentration.

LOEC: Lowest Observed Effect Concentration.

DMEL: Derived Minimal Effect Level.

28364 BROWN PASTE**Classification abbreviations
and acronyms**

Acute Tox. = Acute toxicity

Aquatic Acute = Hazardous to the aquatic environment (acute)

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

21/05/2020

Version number

1.000

SDS number

60354

SDS status

Approved.

Signature

Jitendra Panchal