

SECTION 1: Identification of the substance/mixture and of the company**Product Identifier**

Product Name: PowerSorb™ 312
Chemical Name: N-(2-Ethoxyphenyl)-N'-(2-ethylphenyl)oxamide
CAS-No.: 23949-66-8

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

Relevant applications identified For industrial use

Details of the supplier of the safety data sheet

Company Tintoll Performance Materials Co.,Ltd.
A-703, No. 50 Jialingjiang East St, Nanjing, China
Email: SDS@ Tintoll.com

Emergency Telephone Number: +86-25-8468-0091

SECTION 2: Hazardous identification**Classification of the substance or mixture**

According to Regulation (EC) No 1272/2008 (CLP)

STOT RE (Lymph nodes) 1

Aquatic Chronic 1

According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards:

Toxic: danger of serious damage to health by prolonged exposure if swallowed.

May cause long-term adverse effects in the aquatic environment.

The product is under certain conditions capable of dust explosion.

For the classifications not written out in full in this section the full text can be found in section 16.

Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



Signal word:

Danger

Hazard Statement:

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H 372 Causes damage to organs (Lymph nodes) through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects

Precautionary Statements (Prevention):

P273 Avoid release to the environment.

P260 Do not breathe dust/gas/mist/vapours.

P270 Do not eat, drink or smoke when using this product.

P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P311 Call a POISON CENTER or doctor/physician.

P391 Collect spillage

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

According to Regulation (EC) No 1272/2008 (CLP)

Hazard determining component(s) for labelling: BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)
[[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL]METHYL]BUTYLMALONATE

According to Directive 67/548/EEC or 1999/45/EC

Directive 1999/45/EC ('Preparation Directive')

Hazard symbol(s)

T Toxic



R-phrase(s)

R48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.

R53 May cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Hazard determining components) for labelling: BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)
[[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL]METHYL]BUTYLMALONATE

Other hazards

According to Regulation (EC) No 1272/2008 (CLP)

The product is under certain conditions capable of dust explosion.

SECTION 3: Composition/information on ingredients**Substances**

Not applicable

Mixtures

Chemical nature

Additive for plastic material stabilization

Hazardous ingredients(GHS)

According to Regulation (EC) No. 1272/2008

N-(2-Ethoxyphenyl)-N'-(2-ethylphenyl)oxamide

Content (W/W):>=50%<75% Aquatic Chronic 4

CAS Number: 23949-66-8 H413

EC- Number: 245-950-9

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

Content (W/W):>=20%<25% Acute Tox. 4 (oral)

CAS Number: 63843-89-0 STOT RE (Lymph nodes) 1

EC-Number: 264-513-3 Aquatic Chronic 1

REACH registration number: 01- M-factor chronic: 10

2119978231-37 H302. H372. H410

Hazardous ingredients

According to Directive 1999/45/EC

N-(2-Ethoxyphenyl)-N'-(2-ethylphenyl)oxamide

Content (W/W):>=50%<75%

CAS Number: 23949-66-8

EC-Number: 245-950-9

R-ohrase(s): 53

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

Content (W/W):>=20%<25%

CAS Number: 63843-89-0

EC-Number: 264-513-3

REACH registration number: 01-2119978231-37

Hazard symbol(s): T

R-phrase(s): 22, 48/25, 52/53

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

SECTION 4: First aid measures

Description of first aid measures

Remove contaminated clothing

If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth immediately and then drink plenty of water, induce vomiting, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Dry powder, foam

Unsuitable extinguishing media for safety reasons:

Carbon dioxide

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

Special hazards arising from the substance or mixture

Harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing.

Environmental precautions

Contain contaminated waters/groundwater. Do not discharge into drains/surface water/firefighting water.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Contain with dust binding material and dispose of.

Avoid raising dust.

Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and storage

Precautions for safe handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion:

Avoid dust formation. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage stability:

Storage temperature: <50 °C

The packed product is not damaged by low temperatures or by frost.

Protect from temperatures above: 50 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits

No occupational exposure limits known.

Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with high efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P3 or FFP3).

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding >480 minutes of permeation time according to EN 374):

E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other.

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may

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be much shorter than the permeation time determined through testing.
 Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
 Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
 Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures
 Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Form:	powder
Color:	light yellow
Odour:	odourless
Odour Threshold	No applicable information available
pH value:	insoluble
Melting point	56-59 °C
	The product has not been tested.
	The statements are based on the properties of the individual components.
Boiling point:	not applicable
Sublimation point:	not applicable
Flash point:	not applicable, the product is a solid
Flammability:	not flammable
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Ignition temperature:	no data available
Vapour pressure:	The product has not been tested.
Solubility in water:	insoluble
Solubility (qualitative) solvent(s):	organic solvents soluble
Partitioning coefficient n-octanol / water (log Kow):	Study scientifically not justified.
Self ignition:	not self-igniting
Thermal decomposition:	No decomposition if correctly stored and handled.

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Viscosity, dynamic:	not determined
Explosion hazard:	not explosive
Fire promoting properties:	not fire-propagating

Other information

Self heating ability:	It is not a substance capable of spontaneous heating.
Minimum ignition energy:	No data available.
Radioactivity:	Not radioactive for transport purposes
Bulk density:	approx. 400 kg/m ³
Hygroscopy:	Non-hygroscopic

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

SECTION 10: Stability And Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:	No corrosive effect on metal.
Reaction with:	water
Water/air:	
Flammable gases:	no
Toxic gases:	no
Corrosive gases:	no
Smoke or fog:	no
Peroxides:	no
Reaction with:	air
Flammable gases:	no
Toxic gases:	no
Corrosive gases:	no
Smoke or fog:	no
Peroxides:	no

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Peroxides: 0%

The product does not contain peroxides.

Possibility of hazardous reactions

The product may contain explosive fine dust or such dust may be produced by abrasion during transport or product transfer.

Conditions to avoid

Avoid dust formation. Avoid deposition of dust. Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static charge.

Incompatible materials

Substances to avoid:

Strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information**Information on toxicological effects****Acute toxicity**

Experimental/calculated data:

LD50 rat (oral) : >2,000 mg/kg

(By inhalation): not determined

LD50 rat (dermal) : >2,000 mg/kg

Irritation

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

Respiratory/Skin sensitization

Experimental/calculated data:

Other guinea pig: Non-sensitizing.

Germ cell mutagenicity

Assessment of mutagenicity:

Based on the ingredients, there is no suspicion of a mutagenic effect.

Carcinogenicity

Assessment of carcinogenicity:

Based on the ingredients there is no suspicion of a carcinogenic effect in humans.

Reproductive toxicity

Assessment of reproduction toxicity:

Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Toxic: danger of serious damage to health by prolonged exposure if swallowed.

Information on: Bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

Assessment of repeated dose toxicity:

Repeated exposure may cause effects on the liver, lymph nodes, spleen and blood.

Aspiration hazard

No aspiration hazard expected.

Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

SECTION 12: Ecological Effects**Toxicity**

Assessment of aquatic toxicity:

Very toxic to aquatic organisms based on long-term (chronic) toxicity study data. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Persistence and degradability

Assessment biodegradation and elimination (H20):

The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

Elimination information:

Not readily biodegradable (by DECD criteria).

Bioaccumulative potential

Bioaccumulation potential:

Accumulation in organisms is not to be expected. The product has not been tested. The statement has been derived from the properties of the individual components.

Mobility in soil

Assessment transport between environmental compartments:

The substance will not evaporate into the atmosphere from the water surface.

Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

SECTION 13: Disposal considerations**Waste treatment methods**

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

SECTION 14: Transport Information**Land transport**

ADR

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UN number UN3077
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S
 (Contains STERICALLY HINDERED AMINE)
 Transport hazard class(es): 9, EHSM
 Packing group: III
 Environmental hazards: yes
 Special precautions for users: Tunnel code: E

RID
 UN number UN3077
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S
 (Contains STERICALLY HINDERED AMINE)
 Transport hazard class(es): 9, EHSM
 Packing group: III
 Environmental hazards: yes
 Special precautions for user: None known

Inland waterway transport

ADN

UN number UN3077
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S
 (Contains STERICALLY HINDERED AMINE)
 Transport hazard class(es): 9, EHSM
 Packing group: III
 Environmental hazards: yes
 Special precautions for user: None known
 Transport in inland waterway vessel: Not evaluated

Sea transport

IMDG

UN number UN3077
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S
 (Contains STERICALLY HINDERED AMINE)
 Transport hazard class(es): 9, EHSM
 Packing group: III
 Environmental hazards: yes
 Special precautions for user: None known

Air transport

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IATA/ICAO	
UN number	UN3077
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Contains STERICALLY HINDERED AMINE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

SECTION 15:Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1272/2008.

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

no data available

Chemical Safety Assessment

no data available

SECTION 16:Other Information

Any other precaution

The information herein is made based on references, information and data available at present. It maybe revised when new information is available.The descriptions herein are for normal handling. For special application , make safety provisions suitable to them prior to use.

STOT RE (Lymph nodes) 1

Aquatic Chronic 1

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

T	Toxic
53	May cause long-term adverse effects in the aquatic environment.
22	Harmful if swallowed.
48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
STOT RE	Specific target organ toxicity — repeated exposure
Aquatic Chronic	Hazardous to the aquatic environment — chronic
Acute Tox.	Acute toxicity
H413	May cause long lasting harmful effects to aquatic life.
H302	Harmful if swallowed.
H372	Causes damage to organs (Lymph nodes) through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects