RESONAC

GPS/JIPS Safety Summary

1. Product NAME

Shocaraiser™(Granular Graphite)(CAS No.: 7782-42-5)

2. GENERAL STATEMENT

Shocaraiser is a black granular product made from graphite, which is pre-classified to suppress dust and make it easier to use. The three grades are L, M, and S in descending order of particle size, with S having a size of 0.18 mm or larger (>65%). Shocaraiser (granular graphite) has a high melting point, is thermally stable, and is stable to acids and alkalis.

3. CHEMICAL IDENTITY

Item	Description
Chemical or generic name	Synthetic Graphite
Trade name	Shocaraiser™ (Granular Graphite)
Synonyms	Carbon
CAS No.	7782-42-5
Other No.	Japan: Chemical Substances Control Law, not applicable Japan: Industrial Safety and Health Act, existing chemical substance
Chemical Formula	C
Source/References	Section 3 of the SDS issued by Resonac Graphite Japan Corporation

4. USES AND APPLICATIONS

Main uses	The product is a recarburizer used for adjusting carbon content, mainly with cast items.

5. PHYSICAL/CHEMICAL PROPERTIES

It is a black, odorless, water-insoluble solid. It hardly vaporizes at room temperature (20℃), but may cause a dust explosion when mixed with air in powder or granular form.

Physical state	Solid
Appearance	Granular powder
Color	Black
Odour	Odourless
Melting point/freezing point	It does not liquefy under the ordinary pressure, sublimates.
Decomposition temperature	3650 ℃ (Sublimation temperature (approx.))
Density	0.8 – 1.1 g/cm^3 (Bulk density)
Solubility	Water: not dissolve in water
Sources/references	Section 9 and 10 of the SDS issued by Resonac Graphite Japan Corporation

6. HEALTH EFFECTS

Effect assessment	Results (GHS Hazard Classification)

Acute toxicity (oral)	Classification not possible
Acute toxicity (dermal)	Classification not possible
Acute toxicity (inhalation: gas)	Not applicable
Acute toxicity (inhalation: vapours)	Classification not possible
Acute toxicity (inhalation: dust, mist)	Classification not possible
Skin corrosion/irritation	Classification not possible
Serious eye damage/eye irritation,	Classification not possible
Respiratory sensitisation	Classification not possible
Skin sensitisation	Classification not possible
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Specific target organ toxicity — Single exposure	Classification not possible
Specific target organ toxicity (repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible
Sources/references	Section 11 of SDS issued by Resonac Graphite Japan Corporation

・ GHS (Globally Harmonized System of Classification and Labelling of Chemicals): A system that classifies chemicals according to the type and degree of hazards, labels the information, and provides safety data sheets according to globally harmonized rules.
・ Not applicable: Since the priority of physical state, chemical structure, chemical property, and hazard items used in the GHS classification procedures does not fall under the category, it is not subject to the classification for the category.
・ Not classified: Sufficient information has been obtained to implement the GHS classification, and as a result of the classification, it does not fall under any of the hazard categories specified in the GHS. It is considered to be a lower hazard.
・ Classification not possible : There is not enough information for GHS classification, and classification is not possible.

7. ENVIRONMENTAL EFFECTS

Effect assessment	Results （GHS Hazard Classification）
Hazardous to the aquatic environment, short-term (acute)	Classification not possible
Hazardous to the aquatic environment, long-term (chronic)	Classification not possible
Hazardous to the ozone layer	Classification not possible
Sources/references	Section 12 of SDS issued by Resonac Graphite Japan Corporation

Environmental fate/dynamics	
Mobility in soil	No data available
Persistence/degradability	No data available
Bioaccumulation potential	No data available
Conclusion about PBT/vPvB	The criteria for persistent bioaccumulative and toxic (PBT; remaining persistently in the environment and possessing high bioaccumulation potential and toxicity) and very persistent and very bioaccumulative (vPvB; remaining very persistently in the environment and possessing very high bioaccumulation potential) chemicals are believed to inapplicable.

Sources/references	Sections 12 of the SDS issued by Resonac Graphite Japan Corporation

8. EXPOSURE

Details	Exposure potentials through main uses
Occupational exposures	When handling powders of the substance under normal temperatures, workers could be exposed through oral ingestion, contact with the skin, or inhalation if dust is generated during mixing/blending, measuring, packing, unpacking and other processes involving the substance. Harmful effects have been recognized mainly when the substance's high-density dust was inhaled. This may cause coughing and shortness of breath. Additionally, the substance could cause irritation in direct contact with the respiratory tracts, eyes and skin. However, the harmful effects resulting from oral intake of the substance are believed to be minor.
Consumer exposures	The substance is not used by general consumers. There is the potential that consumers could be exposed though dermal and inhalation exposure if dust is generated during handling powders. Harmful effects have been recognized mainly when its high-density dusts were inhaled, and this could cause coughing and shortness of breath. The substance could also irritate respiratory tracts, as well as the eyes and skin upon direct contact. The harmful effects resulting from oral ingestion are believed to be minor.
Environmental exposures	Although environmental exposure is possible in the following cases, no specific effects on the environment have been reported, as mentioned in Section 7 Environmental Effects.
Precautions	If there is a possibility of exposure in other uses, take appropriate measures with reference to recommended risk management measures.

9. RISK MANAGEMENT RECOMMENDATIONS

Recommended risk management measures can minimize risks to workers, consumers, and the environment from Section 8 exposure scenarios.

Details	Risk management recommendations
Worker	Technical measures: Carry out exhaust ventilation in order to keep a concentration of the substance in the air below the exposure limit value. Install eyewash fountains and safety showers at manufacturing places where the product is stored or handled.
	Local and general ventilation: For controlling and restricting environmental concentrations below the following recommended values, install local exhaust or total ventilation systems at places where the product is manufactured or handled.
	Acceptable concentration: Regarding the product, the Japan Society for Occupational Health published (in 2012) the recommendation values as occupational exposure limits of 0.5 mg/m3 for respirable dust (class 1 dusts)

	and 2 mg/m3 for total dust (class 1 dusts), while the American Conference of Governmental Industrial Hygienists (ACGIH) published (in 2012) the threshold limit value of 2 mg/m3 (time-weighted average; TLV-TWA). Implement management and control measures to keep its dust concentration below these values.
	Protective equipment: While working, wear appropriate protective eye wears, dust-proof masks, air-supplied respirators, clothes and protective gloves made of materials impermeable to powders.
	Precautions The operation manager should educate operators about the selection of appropriate protective equipment, proper usage method, and control method of the work site.
Consumer	If dusts have been generated, take a precaution not to inhale its dusts and not to directly contact with its dusts on the human body. If the exposure amount is large, implement risk management measures similar to those indicated in "Occupational Exposures" above.
Environment	In order to prevent environmental exposures, implement preventive measures against leakage into rivers, water channels, and sewerage trenches, and pay attention to the daily management and handling of the substance.
Precautions	For normal handling, emergency response, disposal, and transportation control measures, refer to sections 4, 5, 6, 7, 8, 13, and 14 of the SDS issued by Resonac Graphite Japan Corporation.

10. STATE AGENCY REVIEW

Hazard assessment	Situations of review
International Chemical Safety Cards	International Chemical Safety Card https://www.ilo.org/dyn/icsc/showcard.display?p_card_id=0893&p_edit=&p_version=2&p_lang=en
OECD HPV	High production volume chemical testing program https://hpvchemicals.oecd.org/ui/search.aspx
NITE-CHRIP (NITE Chemical Risk Information Platform)	https://www.nite.go.jp/en/chem/chrip/chrip_search/srhInput

11. REGULATORY INFORMATION／GHS CLASSIFICATION AND LABELLING INFORMATION

Regulatory information only in Japan

Applicable laws	Regulatory situations
Industrial Safety and Health Act	Not applicable
Poisonous and Deleterious Substances Control Act	Not applicable
Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the	Not applicable

Promotion of Management Improvement and Transfer Register / PRTR)	
UN classification	Not applicable

Hazards	Classification results (hazard information)
Physical hazards	None
Health hazards	None

Labelling Information	
Hazard pictograms (GHS)	None
Signal word (GHS)	None
Hazard statements (GHS)	None

12. CONTACT INFORMATION

Company	Resonac Graphite Japan Corporation
Address	6850 Omachi, Omachi City, Nagano 398-0002 Japan
Departments	Quality Assurance Section, Technology Department, Omachi Plant
Tel. / Fax	+81-261-22-5500／+81-261-22-6442

13. DATE OF ISSUE / REVISION, ADDITIONAL INFORMATION

Date of issue: November 26, 2013

Revisions:

Date of revision	Revised section	Revised item	Version
January 1, 2023	2, 6, 7, 11, 13	update to the latest information	Rev.2

The contents are based on the safety data sheet (SDS) revised on January 1, 2023.

Special instructions: none

14. DISCLAIMER

The safety summary is part of the effort for the voluntary management of chemical substance in the chemical industry (GPS/JIPS: Japan Initiative of Product Stewardship). The purpose of the safety summary is to provide information on the safe handling of the product as an overview and not to provide professional information, such as the risk evaluation process and its impact on human health and the environment. This document is not meant to serve as an alternative to risk evaluation, such as a Safety Data Sheet (SDS) or a Chemical Safety Report (CSR). This safety summary is being written as accurately as possible based on data such as laws, materials, and information available at the time of publication, but it does not include all data. It does not guarantee anything.