SAFETY DATA SHEET

DATED: 01-01-2018

1. PRODUCT AND COMPANY

TRADE NAME:	75- INOCULANT
GRADE	SNAM HIMAN with 1.5-3.0 Ca
GROUP:	
SUPPLIER:	SNAM ALLOYS PVT. LTD., KARIAMANICKAM VILLAGE, PONDICHERRY – 605 106, INDIA.
TOXIC INFORMATION:	+91-413-2699440 & 2699106
RESPONSIBLE:	J.VENKATESAN
AUTHOR:	S.SRIKANTH
APPLICATION:	FOR INDUSTRIAL USE
MORE INFORMATION:	-

2. COMPOSITION

COMPOSITION	SYMBOL	SPECIFICATIONS	CAS NO.
SILICON	Si	60.00-65.00%	7440-21-3
CALCIUM	Ca	1.50-3.00%	7440-70-2
ALUMINIUM	Al	1.00-1.50%	7429-90-5
BARIUM	Ba	4.00-6.00 %	7440-39-3
MANGANSE	Mn	9.0-11.0%	7439-96-5
IRON	Fe	BALANCE	7439-89-6

3. HAZARDS IDENTIFICATION

MORE INFORMATION:
Not regarded as health or fire or an environmental hazard under current legislation.

4. FIRST AID MEASURES

GENERAL:
Remove victim immediately from source of exposure. General first aid, rest, warmth and fresh air. Get medical attention if any discomfort continues.

SKIN CONTACT:
Wash skin with soap and water.

EYE CONTACT:
Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention if any discomfort continues.

INGESTION:
Rinse nose, mouth and throat with water.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISH MEDIA:
Use extinguishing media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARDS:

Ferrosilicon itself does not burn, but keep away from sparks/ignitions when there is a possibility for dusty handling. Wet Ferro-silicon must not be added to a warm, afloat bath of metal.

PERSONAL PROTECTION WHEN FIREFIGHTING:
Wear self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

SPECIAL FIREFIGHTING PROCEDURES:
Cool containers exposed to flames with water until well after the fire is out. Move container from fire area if it can be done without risk.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:
Wear appropriate personal protective equipment - see Section 8.

CLEANING MEASURES:
Spillage can be collected mechanically. Avoid generation and spreading of dust.

7. HANDLING AND STORAGE

HANDLING:
Avoid handling which leads to dust formation.

STORAGE:
Keep stored as dry and airy as possible.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROL:
Use engineering controls to reduce air contamination to permissible exposure level. The concentrations of air pollutants shall be kept as far under the given exposure standards as possible. Unnecessary influence of pollutants shall be avoided and the conditions shall be proper. Provide eyewash station.
Well ventilated area. Wash at the end of each work shift and before eating, smoking and using the toilet.

RESPIRATORY PROTECTION:
If ventilation is insufficient, suitable respiratory protection must be provided. Dust filters P2 (for fine dust).

EYE PROTECTION:
Use tight fitting goggles if dust is generated.

HAND PROTECTION:
Use protective gloves made of: Rubber or plastic.

SKIN PROTECTION:
Wear appropriate clothing if necessary.

MORE INFORMATION:
References OES.
Ingredient comments
OES = Occupational Exposure Standard.
Exposure limit for nuisance dust, total inhalable dust is 10 mg/m3 (8 hour TWA).
Exposure limit for nuisance dust, respirable dust is 4 mg/m3 (8 hour TWA).

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM:	IRREGULAR SHAPED	ODOUR:	N.A.
COLOUR:	GREY METALLIC ALLOY	SOLUBILITY:	N.A.
MELTING/FREEZING POINT:	1600^{0}C	BOILING POINT:	2100^{0}C
DENSITY:	3.5 gms/cc	FLASH POINT:	1400^{0}C
EXPLOSION LIMITS LEL-UEL %:	N.A.	PH (CONCENTRATE.):	N.A.
SOLUBILITY IN WATER:	Insoluble in water.	MOL MASS:	N.A.
VAPOUR PRESSURE:	960 mm Hg	VISCOSITY:	N.A.
SATURATION CONC.:	N.A.	AUTO IGNITION TEMP:	N.A.
DECOMPOSITION TEMP.:	N.A.	SMELL LIMIT:	N.A.
PH (SOLUTION):	N.A.	REL.VAPOUR DENSITY (AIR=1):	N.A.
BULK DENSITY	N.A.		

10. STABILITY AND REACTIVITY

STABILITY:
Normally stable.

REACTIVITY:
Avoid contact with: Water. Bases. Hydrofluoric acid. Reacts with hydrofluoric acid to form toxic silicon Tetra fluoride. In contact with water hydrogen, arsine and phosphine may be evolved.

11. TOXICOLOGICAL INFORMATION

GENERAL:
Medical considerations
Symptomatic treatment.

INHALATION:
Dust may irritate respiratory system.

SKIN CONTACT
Prolonged or repeated contact may cause skin irritation. May give mechanical irritation.

EYE CONTACT:
Dust may give mechanical irritation.

INGESTION:
May cause discomfort.

12. ECOLOGICAL INFORMATION

MOBILITY:
Insoluble in water.

OTHER EFFECTS:
Represents no danger for the environment.

13. DISPOSAL

DECONTAMINATION/DISPOSAL:
Dispose of at an approved land disposal site in accordance with local authority requirements.
Chemicals must be disposed of in compliance with the respective national or local regulations to ensure proper disposal.
DISPOSAL GROUP:
Not dangerous waste.

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: 75- INOCULANT

75- INOCULANT produced at SNAM ALLOYS PVT LTD has been tested according to the "United nations recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria, part III 33.4.1.4". There was no emission of Gas in contact with water. This material is therefore not classified as Dangerous Goods, Class and is not subjected to ADR or IMDG code regulations.

If the chemical or Physical properties of a substance covered by the description are such that when tested, it does not meet the established defining criteria for the class or division listed in column 3 or any other class or division, it is not subject to the provision of this code except in the case of marine pollutant where 2.10.3 applies:

UN Number.	**:**	**N.A.**
IMDG – CODE/IATA	**:**	**Not Regulated**
ICAO/IATA	**:**	**Not Regulated**
ADR/RID	**:**	**Not Regulated**

75- INOCULANT IS NOT CONSIDERED TO CAUSE HARM TO AQUATIC ORIGINISMS.

75- INOCULANT IS NOT A MARINE POLLUTANT

75- INOCULANT IS CLASSIFIED AS NON- DANGEROUS GOODS.

15. REGULATORY INFORMATION

REFERENCES:

Revised in compliance with national regulations for health, fire and environment labeling. (The Working Environment Act, Pollution Control Act, Act relating to Prevention of Fire, Explosion and Accidents involving Hazardous Substances and the Fire Services) Transport legislation: The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (ADR/RID), The International Maritime Dangerous Goods (IMDG), International Air Transport Association Dangerous Goods (IATA) EU-directives: 67/548/EEC, 1999/45/EC, 2001/58/EC, and 2004/73/EF (29. ATP) with later amendments.

MORE INFORMATION:
Not classified.

EU directives
Substances Directive 67/548/EEC as amended by 69/81/EEC, 70/189/EEC,
73/146/EEC, 75/409/EEC, 79/831/EEC General Preparations Directive 88/379/EEC.
Contains
Red phosphorus
Calcium
Ferrosilicon
Iron
Aluminum

16. OTHER INFORMATION

Snam Alloys Pvt. Ltd.,
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